



agency for science and higher education

**REPORT
OF THE EXPERT PANEL
ON THE
RE-ACCREDITATION OF
COLLEGE OF SLAVONSKI BROD**

Date of site visit:
12 - 13 November 2019

January 2020



The project is co-financed by the European Union from the European Social Fund.

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INTRODUCTION

The Agency for Science and Higher Education (the Agency) is an independent legal entity with public authority, registered in the court register, and a full member of the European Quality Assurance Register for Higher Education (EQAR) and European Association for Quality Assurance in Higher Education (ENQA).

All public and private higher education institutions are subject to reaccreditation, which is conducted in five-year cycles by the Agency, in accordance with the Act on Quality Assurance in Science and Higher Education (Official Gazette 45/09) and subordinate regulations, and by following *Standards and Guidelines for Quality Assurance in the European Higher Education Area* (ESG) and good international practice in quality assurance of higher education and science.

The Agency's Accreditation Council appointed an independent Expert Panel for the evaluation of the College of Slavonski Brod.

Members of the Expert Panel:

1. Asst. prof. dr. sc. Armand Faganel, Fakulteta za Management, Univerza na Primorskem, Slovenia – **President of the Expert Panel**,
2. Prof. dr. Ivica Kisić, Faculty of Agriculture, University of Zagreb, Croatia,
3. Prof. dr. Juraj Havelka, University of Zagreb Faculty of Electrical Engineering and Computing, Croatia,
4. Dr. Tonko Kovačević, college professor, University of Split - University Department of Professional study programmes, Croatia,
5. Paula Haške, student, VERN' Polytechnic, Croatia.

During the site visit, the Expert Panel held meetings with the following stakeholders:

- Management,
- Head of Social Department, Head of Agricultural Department, Head of Technical Department,
- Full-time teaching staff,
- Students,
- External associates,
- External stakeholders - representatives of professional associations, business community, employers, industry experts,

- Head of the Quality Assurance Unit,
- Head of Lifelong Learning Centre,
- Head of International Cooperation Office,
- Erasmus and CEEPUS coordinators,
- Heads of professional practice,
- Representatives of alumni,
- Representatives of Agricultural Secondary School, representatives of BioTech Regional Center for Biotechnology Research and Development.
- Heads of laboratories in Đuro Đaković factory.

The Expert Panel members had a tour of the work facilities, laboratories, library, IT classrooms, student administration office and classrooms, and attended sample lecture, where they held a brief Q&A session with students.

In accordance with the site visit protocol, the Expert Panel examined the available additional documents and study programme descriptions (learning outcomes).

The Expert Panel drafted this Report on the re-accreditation of the College of Slavonski Brod on the basis of the College of Slavonski Brod self-evaluation report, other relevant documents and the site visit.

The Report contains the following elements:

- Short description of the evaluated higher education institution,
- Brief analysis of the institutional advantages and disadvantages,
- List of institutional good practices,
- Analysis of each assessment area, recommendations for improvement and quality grade for each assessment area,
- Detailed analysis of each standard, recommendations for improvement and quality grade for each standard,
- Appendices (quality assessment summary by each assessment area and standard, and site visit protocol),
- Summary.

In the analysis of the documentation, site visit to the College of Slavonski Brod and writing of the Report, the Expert Panel was supported by:

- Vlatka Šušnjak Kuljiš, coordinator, ASHE,

- Frano Pavić, coordinator, ASHE.

On the basis of the re-accreditation procedure conducted, and with the prior opinion of the Accreditation Council, the Agency issues a following accreditation recommendation to the Minister for Higher Education and Science:

1. **issuance of a confirmation on compliance with the requirements** for performing the activities, or parts of the activities
2. **denial of license** for performing the activities, or parts of the activities
3. **Issue a letter of expectation** with the deadline for resolving deficiencies of up to three years. A letter of expectation can include the suspension of student enrolment within a set period.

The accreditation recommendation also includes a quality assessment of a higher education institution, and recommendations for quality improvement.

SHORT DESCRIPTION OF THE EVALUATED HIGHER EDUCATION INSTITUTION

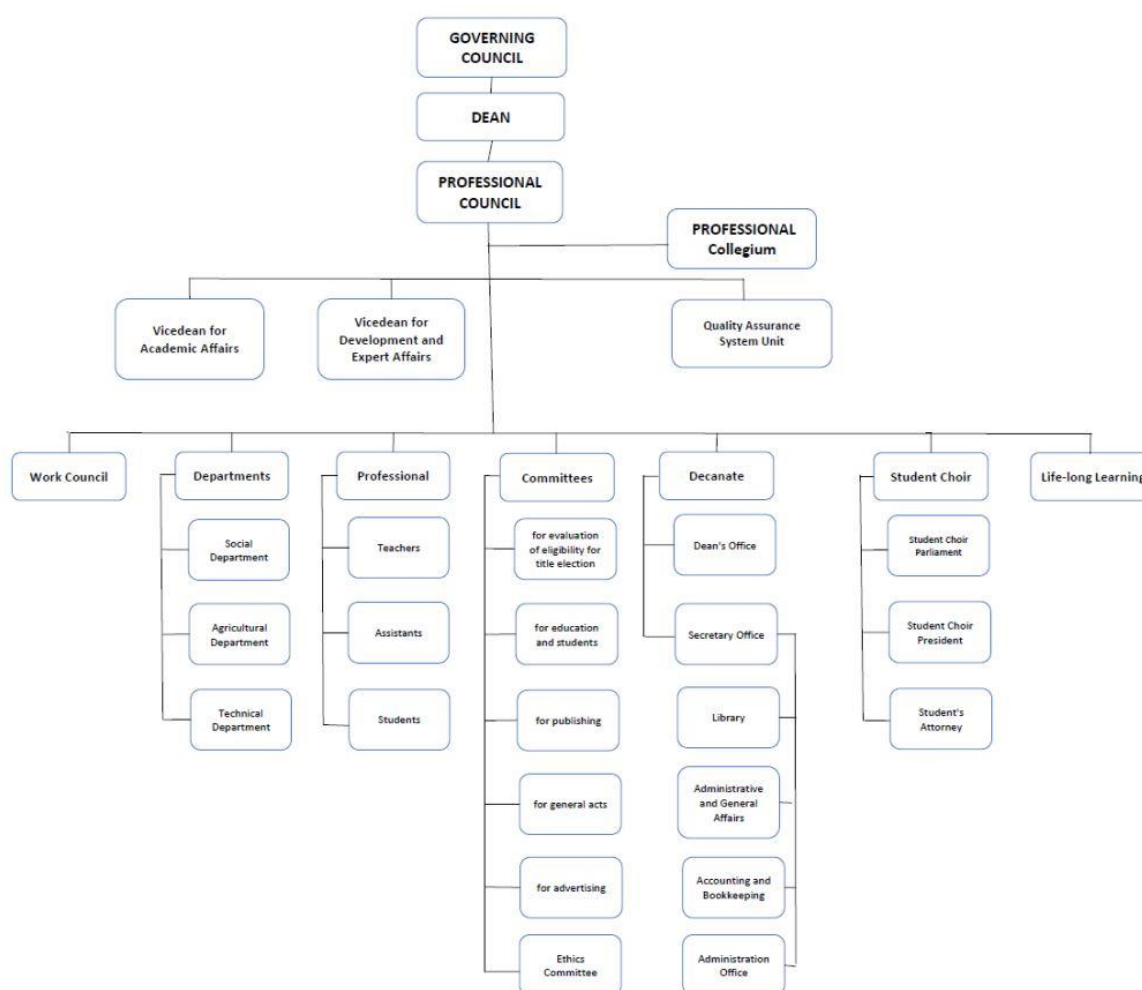
NAME OF HIGHER EDUCATION INSTITUTION: Polytechnic of Slavonski Brod

ADDRESS: Dr. Mile Budaka 1, 35 000 Slavonski Brod

DEAN: Prof. dr. Krunoslav Mirosavljević

ORGANISATIONAL STRUCTURE:

According to the Self-evaluation document



STUDY PROGRAMMES

Data retrieved from the MOZVAG database

No.:	Study programme name	Study programme type	Higher education institution	No.: ECTS credits	CROQF LEVEL
1	Plant Production, specialisations in: Farming, Horticulture	Undergraduate professional study programme	College of Slavonski Brod	180	6
2	Management	Undergraduate professional study programme	College of Slavonski Brod	180	6
3	Production Engineering	Undergraduate professional study programme	College of Slavonski Brod	180	6
4	Ecological Agriculture and Rural Development	Specialist graduate study programmes	College of Slavonski Brod	120	7
5	Energetics	Specialist graduate study programmes	College of Slavonski Brod	120	7
6	Management	Specialist graduate study programmes	College of Slavonski Brod	120	7

** CROATIAN QUALIFICATIONS FRAMEWORK

Source: Data retrieved from MOZVAG Directory.

NUMBER OF STUDENTS:

The number of students per study programme for the current academic year is presented in table 3.1. of the Analytical Supplement to the Self-evaluation.

Study programme name	Full-time students	Part-time students
Management (485)	196	153
Plant Production, specialisations in: Farming, Horticulture (486)	87	44
Production Engineering (487)	147	186
Total number of students at the undergraduate level	430	383
Management (488)	0	124
Energetics (490)	33	35
Ecological Agriculture and Rural Development(491)	33	12
Total number of students at the graduate level	66	171
Total number of students in all study programmes;	496	554
Number of students	1050	

NUMBER OF TEACHERS:

The structure of the teaching staff is specified in Table 4.1.b of the Analytical Supplement to the Self-evaluation.

Staff	Full-time employees	Part-time employees (cumulative employment)	External associates
College professors with tenure	-	-	-
College professors	7	-	2
Senior lecturers	13	-	5
Lecturers	5	-	20
Language instructors	-	-	-
Full professors with tenure	-	-	-
Full professors	1	-	18
Associate professors	1	-	1
Assistant professors	2	-	5
Expert assistants	-	-	-
Assistants	-	-	15
Technical staff	2	-	-
Administrative staff	9	-	-
Assistant staff	-	-	-

SHORT DESCRIPTION OF THE EVALUATED HIGHER EDUCATION INSTITUTION

On September 28, 2006, based on the Decision of the Government of the Republic of Croatia (Official Gazette 108/2006), the College of Slavonski Brod was established. On December 4, 2006, teaching at all professional studies of the College began and in June 2008, teaching within the life-long education program starts at the College of Slavonski Brod.

College defines the mission, vision, quality policy and environmental policy. Mission and vision are an integral part of the College's Strategy.

Employees, external associates and students participate in the development of the College's strategy through their representatives.

Mission

College of Slavonski Brod, by continuously improving and ensuring the quality of higher education and its own activity within the existing study programs, and by initiating, organizing and conducting new professional studies in accordance with the needs of the economy and the labour market and conducting various forms of lifelong education, in an effort to achieve the status of a scientific institution, promotes the importance, purposefulness and recognizability of vocational higher education with the aim of permanent transfer of knowledge and achievement of social relevance of the professional studies and qualifications in the field of activity.

Vision

To position the College of Slavonski Brod as a modern higher education institution with recognizable forms of vocational and lifelong education and as a center of excellence in vocational higher education, scientific and professional activity and research in the field of activity.

BRIEF ANALYSIS OF THE INSTITUTIONAL ADVANTAGES AND DISADVANTAGES

ADVANTAGES OF THE INSTITUTION

1. Considering the geopolitical situation of the Brod-Posavina County and the Republic of Croatia, and based on information acquired by this Expert Panel regarding the cooperation between College of Slavonski Brod and the economy as well as the attention dedicated to students, which is visible from their education and the subsequent care about their employment, the Expert Panel thinks that College of Slavonski Brod develops and encourages its social role in a way that is significant for the strategic development of Brod-Posavina County and the Republic of Croatia.
2. High student and alumni satisfaction with the study programmes.
3. High motivation, helpfulness and availability for students of administrative and teaching staff.
4. Implementation of lifelong learning programmes.
5. Teaching on all College of Slavonski Brod programmes is based on and connected to practical work.
6. Students work in small groups.
7. Possibility to change study programmes in a more frequent and easy way.
8. Availability of teaching staff, good relationship between teachers and students.
9. Lower costs of living in comparison to bigger cities.
10. Great connection established between secondary school programmes and the College. Students that carried out experiments in secondary school continue to carry out the same professional and scientific research at the College of Slavonski Brod.

DISADVANTAGES OF THE INSTITUTION

1. Considering the strategic importance of College of Slavonski Brod, previously identified under point 1 (ADVANTAGES OF THE INSTITUTION), the opinion of the Expert Panel is that not enough attention is being dedicated to the employment of staff at the expense of the Ministry of Science and Education. This issue is related to the fact that only two salary multipliers have been obtained from the Ministry in the past eight (8) years. The Expert Panel suggests to open negotiations with the aforementioned Ministry over the employment of full-time and part-time young teachers.
2. Insufficient number of teachers and administrative staff employed by the HEI and their heavy workload.
3. Lack of adequate space (Departments and Offices are dislocated).
4. Professional projects represent a great potential that is not yet being exploited.
5. Larger professional output of teaching staff and publishment of professional papers are also a potential resource.

6. The College is situated in an area marked by negative demographic trends.
7. Limited purchasing power of economic subjects and local authority in the surrounding area. For this reason, the majority of economic subjects is not interested in cooperating with the College.
- 8.

LIST OF INSTITUTIONAL GOOD PRACTICES

EXAMPLES OF GOOD PRACTICE

1. The satisfaction of Belgian students on incoming mobility has resulted in the continuity of incoming mobility from Belgium and in the production of a brochure dedicated to the promotion of outgoing mobility to College of Slavonski Brod.
2. College of Slavonski Brod is one of the founding members of the International TEAM Society.
3. The integration of different forms of teaching (lectures, seminars and practical work) is visible through the activities carried out at College of Slavonski Brod, BioTech Centre and Agricultural Secondary School.
4. Seven new employments at the expense of the HEI in order to reduce the teaching staff's workload and to broaden students' horizons thanks to the work of new teachers at College of Slavonski Brod.
5. The HEI is trying to solve the problem of high drop-out rates by implementing STEM Eco&Energetics project in order to attract students to College of Slavonski Brod.
6. Work with students with special needs.
7. During their studies, students complete their professional practice in industrial plants and, after completing their studies, they get employed in the same industrial plants.

ANALYSIS OF EACH ASSESSMENT AREA, RECOMMENDATIONS FOR IMPROVEMENT AND QUALITY GRADE FOR EACH ASSESSMENT AREA

I. Internal quality assurance and the social role of the higher education institution

Analysis

VuSB has chosen the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG) for the establishment and the implementation of its quality assurance system. VuSB has established an adequate quality assurance system. VuSB has developed and adopted a Strategy for the period 2018-2022 that includes a SWOT analysis highlighting the main strengths, weaknesses and opportunities. The basic instrument for implementing the strategy are the annual operational plans, which define in detail tasks that have to be fulfilled to implement the measures; expected effects/results for each task/indicator and competence needed to carry out the tasks. After each evaluation, VuSB has analysed the recommendations for improvement, and is carrying out activities within its capabilities.

The HEI had difficulties in implementing certain recommendations due to financial difficulties or external factors, which VuSB couldn't influence. The Expert Panel noticed a continuous work to improve the quality assurance system; four recommendations were only partially implemented. Activities for the realisation of these recommendations have been put in place.

VuSB has adopted an Ethical Codex and a Rulebook on disciplinary responsibility of VuSB teachers and associates as well as a Rulebook on disciplinary responsibility of students. Subject matters are also covered in the Rulebook on Study at the College of Slavonski Brod (December 2018), as well as the Rulebook on Work. In order to apply these principles, the Ethics Commission, the Disciplinary Tribunal for Teachers and Associates of VuSB, the Higher Disciplinary Tribunal for Teachers and Associates, the Disciplinary Tribunal for Students of VuSB and the Higher Disciplinary Tribunal for Students operate within the permanent working bodies of the Professional Council of the College of Slavonski Brod. VuSB has not had any initiated procedures for unethical conduct in the last five years.

VuSB actively and continuously presents and promotes its results and role in the society. In December 2018, VuSB has adopted a Communication and Publicity Strategy according to which it operates and continuously publishes information. Since 1st of April 2019, the redesigned website of the College of Slavonski Brod is operative.

College of Slavonski Brod is a co-organizer and exhibitor of the Review of Study Programmes in Brod-Posavina County, which has been taking place since 2017. VuSB has recognized the importance of lifelong learning as a modern way of acquiring new knowledge and skills and raising competitiveness. The HEI contributes to the development of the local community by participating as a partner in various projects of social interest, organizing roundtables and public lectures, participating in humanitarian actions etc.

Recommendations for improvement

- The Panel recommends regular and up to date publishing of relevant documents related to the quality assurance system on the VuSB website.
- Employ a person in charge of tasks pertaining to the quality assurance system.
- In order to upgrade the system of rewarding scientific excellence, the HEI should prepare a Manual on rewarding of teacher excellence.
- Continue to support academic integrity and freedom, also through round table discussions, hosting external lecturers and sim.
- Openly discuss ethical issues; recall to VuSB stakeholders the importance of ethical behaviour and reporting unethical activities.
- Improve the webpage in English as soon as possible, including the documents available through a link.
- Develop activities aimed at increasing the recognisability of VuSB and its visibility in public space by including new communication channels, for example LinkedIn.
- Information about all VuSB activities are published quite often on the HEI's Facebook page, but this information could be presented in a more interactive way, for example in the form of quizzes, questions, short videos taken during lectures etc. in order to attract and activate readers/viewers.
- Even more proactive participation of VuSB in humanitarian and volunteering campaigns organised by the City of Slavonski Brod or the County, and also organisation of more innovative ways of providing assistance.
- Equal distribution of volunteering activities between all VuSB stakeholders and students should be encouraged to participate in these activities.
- To the extent possible, invite more practitioners as guest lecturers that will discuss the problems they deal with in their companies, thus giving to students the opportunity to get familiar with actual and concrete examples.
- Development of short training programmes in the field of management dedicated to owners and employees of small enterprises, so that they can enhance their competences and acquire new knowledge.

- Development of a start-up hub to bring together students from different study fields and enable the realisation of innovative projects and ideas.

Quality grade

Satisfactory level of quality

II. Study programmes

Analysis

College of Slavonski Brod has authorizations for conducting undergraduate and specialist graduate professional studies in Management, undergraduate professional study in Production Engineering, specialist graduate professional study in Energetics, undergraduate professional study in Plant Production (Horticulture and Crop production) and specialist graduate professional study in Ecological Agriculture and Rural Development. College of Slavonski Brod defined the learning outcomes of each course and all study programmes, and they are aligned with the mission and goals of the HEI. The Management of the College continuously encourages teachers to improve the teaching process by using different teaching methods, in order to increase the level of knowledge and skills as well as the satisfaction with the quality of studies of current students, and to stimulate greater interest for enrollment in future students.

In the framework of relevant events (Croatian Traditional Flavours Days, Florafest or Mechanical technologies in the production of welded constructions and products and sim.), the College organised round tables called Improvement and Quality Assurance of Higher Education at the College of Slavonski Brod in accordance with the needs of the economy. At the round tables, a discussion was held on the continuous adaptation of existing study programmes to the needs of the economy and the labor market; the improvement of professional practice and on learning outcomes of study programmes aligned with the needs of the profession, the economy and the labor market.

The College allocates ECTS credits in accordance with the actual student workload, based on the analyses of feedback from stakeholders in the teaching process. Part of ECTS credits in the study programme is gained in practical teaching. Professional practice is a compulsory and integral part of the teaching process at all undergraduate professional and specialist graduate professional studies.

Recommendations for improvement

- Reduce the number of lectures and increase that of seminars and practical classes for certain courses of the specialist professional graduate study in Energetics; the ratio between lectures and practical classes should be at least 1:1, and if possible, in favour of practical classes.
- Clearly define learning outcomes for certain courses of the specialist professional graduate study in Energetics; the focus should be on calculations of parameters and design of specific components or integral systems, and not only on their description and explanation.

- Reduce the share of ex cathedra teaching (lectures) and increase the number of hours of professional practice and seminar papers presented by students. If possible, each teacher shouldn't participate in (or be the holder of) more than three courses in the study programme executive plan.
- Align learning outcomes of certain courses with the course's name. Collect feedback from students through a survey and from employers that hire students. Indicate the obligatory literature necessary for passing a course.
- Continue to constantly encourage teachers' professional development through the acquirement of new scientific and professional knowledge (for example, an outgoing mobility), new teaching techniques (distance learning) as well as presentation and communication skills.
- Encourage the acquirement of skills through practical work; encourage the development, improvement and provision of counselling and professional services and educations in topics from the HEI's field of activity, in order to meet the needs of the market, the economy and other institutions.
- Organise and encourage students to complete professional practice abroad as part of an outgoing mobility.

Quality grade

Satisfactory level of quality

III. Teaching process and student support

Analysis

After all the meetings have been held, the documentation examined and the site visit completed, the Panel established that the College provides support to students through the teaching process and at all other levels concerning conditions of study, students from vulnerable and underrepresented groups, international mobility, objective and consequent assessment and evaluation of student achievements, issue of diplomas and supplementary study certificates, and the care for the employability of students after their studies. The criteria for enrolment are clearly defined and published, distinction courses for students enrolling specialist graduate study programmes are also defined and the HEI has a mechanism for recognizing ECTS points and grades obtained at other higher education institutions. VuSB has put in place a mentoring system for monitoring student progress in the study in order to reduce drop-out rates. The College provides student-oriented teaching by the use of different teaching methods in accordance with the envisaged learning outcomes: lectures, laboratory and auditory practice, experiments, practical work, individual and group work. Appropriate support for students is ensured through meetings between students and the Vice Dean for Academic Affairs or their mentors, organisation of a Open door day when students have the possibility to talk with representatives of the economy, cooperation with the Career Information and Counseling Center in Slavonski Brod (CISOK), and by providing financial help to students with lower socio-economic status. Teaching is adapted to part-time students and accordingly, takes place in the afternoon or on Saturdays; regarding students with disabilities, an individual approach is being adopted to teaching and evaluation of learning outcomes. College provides considerable support to students who decide to apply for international mobility through the work of the Office for International Cooperation and the ERASMUS+ and CEEPUS Coordinator, and makes every effort to attract foreign students by providing favourable conditions for studying. Students are informed about the criteria for assessment and evaluation based on learning outcomes; evaluation results are published on the HEI's website under the student's ID number, and those who are not satisfied with the grade they attained and the evaluation method which was used can, within 48 hours after the exam took place, file a complaint and request taking the exam in front of a committee of teachers. Upon completion of their studies, students are issued a diploma in Croatian language and a supplementary study certificate in Croatian and in English language free of charge; on individual request and by paying a fee, students can also be issued a diploma in English language. The College takes care of the employability of students after their studies by collecting and analysing data obtained from the Croatian Employment Service, aligning enrolment quotas, holding meetings with representatives of the economy, cooperating with the Career Information and

Counseling Center (CISOK), organising the Review of Study Programmes, and through activities carried out by the Alumni association.

Recommendations for improvement:

- Make a more detailed analysis of student success in the study depending on the requirements for enrolling or continuing and making progress in the study, and take appropriate measures (preparatory courses, more meetings with mentors) in order to reduce the number of drop-outs.
- Align the number of hours dedicated to teaching theory (lectures) with that of laboratory/auditory practice in order to shift the focus onto students' practical work.
- Increase the accessibility of premises to persons with disabilities and adapt all other teaching aids depending on the type and degree of disability.
- Increase the objectivity and reliability of evaluation by introducing double evaluation and metaevaluation.
- Modernise study programmes in Production Engineering, Plant Production, Energetics and Ecological Agriculture and Rural Development by introducing new courses and/or programmes/modules in order to increase the interest of potential students in enrolling in these study programmes.

Quality grade

Satisfactory level of quality

IV. Teaching and institutional capacities

Analysis

In accordance with the Rulebook, teaching of all study programmes is duly covered by teachers permanently employed at the College, and all teachers have the appropriate competencies for the performance of teaching. The ratio between students and full-time teachers is appropriate. The Ministry of Science and Education hasn't authorised the employment of more than two teachers at its expenses from 2010 till the present date so that certain teachers are overloaded with work. The Panel examined each study programme and their courses and concluded that all teachers are qualified for the courses they teach as part of one of the study programmes. The elements of the Standard describing whether the higher education institution ensures adequate teaching capacities are met, except for the part regarding the workload of certain teachers.

The parent institutions of external associates where students complete their professional practice have excellent equipment. External associates include in the teaching process the latest information available to them at that time thanks to their professional experience. College carries out activities aimed at improving the quality of professional practice and allowing students to gain professional experience. All external associates have the required qualifications and professional experience, and VuSB has concluded a number of cooperation agreements with various institutions.

Regarding the promotion of teachers to higher positions, VuSB has defined recruitment methods for each position in compliance with applicable legal and regulatory requirements. Upon examination of the Strategy of the College of Slavonski Brod, it is clear that the employments are a result of the VuSB's development goals, in accordance with the current socio-economical possibilities. The Panel found numerous indicators of excellence that include professional, scientific and teaching activities. VuSB has a Commission for the evaluation of teachers that gives recommendations for the improvement of teaching competencies on the basis of the assessment of teaching performance and the results of student evaluation of teachers' work.

The available surface area per student is larger than the minimum required of 1,25 m² per student. The College performs its activities at a number of locations in Slavonski Brod. This is a problem which was recognized by the Brod-Posavina County and the City of Slavonski Brod; they donated land for the construction of the College campus and the necessary buildings, a building permit was issued as well, but due to the considerable construction costs (over HRK 150 million) it is very likely that the project will not be carried out. In June 2019, a pre-contract for the lease of office space on three floors, in total 1500 m², located in the center of the city was signed. The library and its level of

equipment ensure the requirements of study as well as professional and scientific activity.

Upon examination of the tables showing HEI's incomes and expenditures, the Panel concluded that VuSB manages available financial resources transparently, purposefully and effectively. Additional sources of financing are also being used purposefully and in accordance with the Strategy of the College. In addition to study programmes, VuSB also implements more than twenty different lifelong learning programmes through which additional sources of financing are obtained. One part of the additional sources of financing is being realised from EU Funds.

Recommendations for improvement

- It is recommended to open negotiations with the line Ministry in order to obtain the necessary number of salary multipliers that would allow, in compliance with the new collective agreement, to reduce the heavy workload of teachers at VuSB.
- It is recommended to increase the percentage of external associates' mentoring.
- The Panel suggests widening the scope of the professional practice and introducing more diversity in it.
- It is recommended to establish additional criteria for the promotion of teachers that will be fully compliant with the VuSB's strategic goals.
- The Panel suggests that the HEI should try to increase outgoing and incoming teacher mobility.
- The Ministry of Science and Education and the Management Board of the College, whose majority is formed by members appointed by the aforementioned Ministry, are required to secure an adequate space for the normal functioning of the College of Slavonski Brod, by taking the appropriate decisions and giving their consent in order to meet this need.
- The Panel suggest to enlarge the library, continuously invest in increasing the library's fund and employ at least one expert librarian.
- It is recommended to increase the incomes of VuSB through additional sources of financing such as various international and EU projects and by way of an even closer cooperation with the existing industry.

Quality grade

Satisfactory level of quality

V. Professional and/or scientific activity

Analysis

College of Slavonski Brod systematically encourages its employees to write and publish quality professional and/or scientific papers. VuSB has brought in a Rulebook on the training and professional development of teaching and non-teaching staff. Each year, VuSB prepares a Training Plan for teaching staff; one section of the Plan contains a list of scheduled national and international conferences that each teacher plans to attend with a paper prepared for that purpose. The main goal of writing and publishing professional and/or scientific papers is the desire of teachers to provide students with the latest insights from the field in which they study, as well as to open up opportunities for students to participate in the research process. The publication of papers in international journals or conference proceedings at the level of at least fifteen papers a year is defined by the VuSB's Strategy.

The higher education institution takes into consideration the needs of local community and labour market in planning its professional and/or scientific and research activities. The College is in constant contact with businessmen through cooperation agreements or round tables organised by the Social, Technical and Agricultural Departments. On the basis of a cooperation agreement, VuSB utilises equipment from the BioTech Center and the chemistry laboratory of the M. A. Reljković Agricultural Secondary School for teaching at the undergraduate and graduate level. Through the STEM project, equipment was purchased for the needs of the Technical Department which uses the Practicum for CNC Machines and the Practicum for Renewable Energetics, as well as the laboratories (laboratory for material testing, welding laboratory and laboratory for particle separation) of the Faculty of Mechanical Engineering in Slavonski Brod.

The number and quality of scientific and professional papers published by a certain number of teachers are very modest and the Panle suggests taking measures in order to improve this situation.

Recommendations for improvement

- Systematically encourage the teaching staff to write and publish quality professional and scientific papers. VuSB is encouraged to purchase equipment and instruments primarily for teaching on the basis of which students would write final theses; scientific/professional papers of higher quality could then be written based on these theses.
- Increase the participation of all teachers in the application for professional projects, from cooperation with local agriculture to national, regional and EU projects.

- The Agricultural Department should, through various projects, purchase equipment that could be used at the trial facility in Slobodnica, and which the other two departments of the College could also use.
- It is necessary to create an organisational environment that will further motivate teachers to write scientific and professional papers of higher quality; the HEI could for example: develop a mentoring system where more experienced researchers help their younger colleagues apply for projects and write papers, allocate part of the received project funds to the person that made the application, integrate project ideas proposed by the HEI's departments, enhance scientific cooperation with other HEIs, reward through the creation of a fund for financing the active participation in scientific conferences on the basis of the realised scientific production etc.
- The HEI could place value on writing notes for internal usage, be it peer-reviewed or just handwritten. In this way, extensive (fairly useless) literature for certain courses would be replaced, and for other courses where obligatory literature is not defined these notes could be used as study material.
- Course holders and teaching associates should take courses in didactics, cognitive science and communicology for the purpose of improving the teaching process.
- Impose to all teachers the obligation to participate in national and local congresses, where each year the teachers would make an oral exposition of at least one paper.
- At College level, unify as much as possible the assessment and evaluation of knowledge tested in exams (calculation of the grade average).
- Encourage the participation of VuSB's staff in scientific projects carried out by higher scientific institutions (universities or institutes).

Quality grade

Minimum level of quality

DETAILED ANALYSIS OF EACH STANDARD, RECOMMENDATIONS FOR IMPROVEMENT AND QUALITY GRADE FOR EACH STANDARD

I. Internal quality assurance and the social role of the higher education institution

1.1 The higher education institution has established a functional internal quality assurance system.

Analysis

Evidence gathered: Evidence gathered during the site visit and indicators from the Self-evaluation report: Quality Assurance Policy dated 28 January 2010, Quality Assurance Manual dated 28 January 2019, Rulebook on the organisation and operation of the quality system dated June 2015, Quality Assurance Plan for 2019, Strategy of the College of Slavonski Brod 2018-2022, Implementation of the Operational Plan for the Strategy of the College of Slavonski Brod for 2018, Report on the Internal Audit of the Quality System for 2019, Rulebook on improvement and professional development of teaching and non-teaching staff of the College of Slavonski Brod dated 2019 and feedback from stakeholders.

The following elements of the standard are realised: on the basis of the Self-evaluation report, interviews carried out and other documents, the Expert Panel has established that: VuSB has chosen the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG) for the development and implementation of its quality system; VuSB has a Quality Assurance Unit that handles quality assurance. The Unit has an advisory level and is independent of the Professional Collegium and the leadership of individual Departments. The Quality Assurance Unit has 10 members, in accordance with the Rulebook on the organisation and operation of the quality system. Each year, the Quality Assurance Unit proposes a Quality Assurance Plan (in line with ESG guidelines), which is adopted by the Professional Council. The internal quality assurance system at the College of Slavonski Brod is defined by the Quality Assurance Policy, the Environmental Protection Policy, the Rulebook on the organization and operation of the quality system, the Quality Assurance Manual and the Strategy of the College of Slavonski Brod 2018-2022; the assurance and continuous improvement of quality is based on regular internal audits of the system, which, in addition to employees, include students and external stakeholders, and on the recommendations of external independent periodic audits carried out by the competent institutions; students are included through their representatives in the Departmental Council, the Professional Council (one student from each professional study, according to the Statute of the College, Article 47/2), the Quality Assurance Unit, the Ethics Commission (Article 22 of the Ethical Codex), as well as

disciplinary courts for students (Rulebook on disciplinary responsibility of students of the College of Slavonski Brod, Art. 11); VuSB has developed and adopted a Strategy for the period 2018-2022 which emphasizes the following values: integration of education and practice, social responsibility, promotion of environmental standards and renewable energy sources, openness, inclusiveness and equality; VuSB's Strategy includes a SWOT analysis which highlights main strengths, weaknesses and opportunities; the basic instrument for implementing the Strategy are annual Operational Plans, which define in detail for each of the envisaged measures: the tasks to be taken on to implement the measures, expected effects/results for each task/indicator and competence to carry out the task.

It is evident that VuSB has set up a stable and functional internal quality assurance system. Nevertheless, the Panel has established that certain documents pertaining to the quality assurance system have appeared on the VuSB's website only a day or two before the arrival of the Panel in Slavonski Brod (for example, Plans and implementation of Quality Assurance Plans for 2017 and 2018, Standards and Guidelines for Quality Assurance in the European Higher Education Area, Quality Assurance Manual, Reports from previous evaluations carried out by ASHE etc.). It is understandable that all the updates of the institution's website can't be made instantaneously, and the Panel is aware of the HEI's overload with day-to-day business, but it is advisable to publish relevant documents as promptly as possible.

Recommendations for improvement

It is recommended to publish regularly and promptly relevant documents pertaining to the quality assurance system on the VuSB's website.

Quality grade

Satisfactory level of quality

1.2 The higher education institution implements recommendations for quality improvement from previous evaluations.

Analysis

Evidence gathered: Evidence gathered during the site visit and indicators from the Self-evaluation report: implementation of recommendations from the internal audit carried out by the University with evidence; re-accreditation of higher education institutions in the Republic of Croatia – ASHE 2012; audit of quality assurance system in 2015; Activity plan for the follow-up phase; Report on the implementation of the Activity plan for the follow-up phase; Quality system assurance plan; Implementation of the Quality assurance plan; Operational plan for the Strategy of the College of Slavonski Brod; Implementation of the

Operational plan for the Strategy of the College of Slavonski Brod and feedback from stakeholders.

The following elements of the standard are realised: VuSB has so far undergone the following external evaluation procedures: external audit of the quality assurance system – voluntary participation in the pilot project of the *Accreditation Organisation of the Netherlands and Flanders* (NVAO) in 2011, first cycle of re-accreditation (ASHE) in 2012, audit of quality assurance system (ASHE) in 2011 and audit of quality assurance system (ASHE) in 2015.

After each internal and external evaluation has been carried out, VuSB analysed the proposals for improvement and undertook the activities based on these proposals within its capabilities. Some of the proposals were challenging to implement due to financial difficulties or external factors, which the institution couldn't influence. The Panel noted the continuous work on the improvement of the quality assurance system; four recommendations were only partially realised.

Recommendations from previous reports realised:

The College is recommended to edit (complete) the organisational, i.e. managerial structure and to determine functions (positions) and areas of activity of the Vice-Dean in relation to the other managerial structures of the College.	Articles 42, 43, 44 and 45 of the VuSB Statute define the function (position) of the Vice-Dean and his/hers areas of activity.
The enrolment process should be more transparent.	Based on the decision on enrolment made by the Professional council, the Dean announces a competition for enrolment of students six months before the beginning of the academic year. The competition contains enrolment requirements, the number of places for enrolment, the amount of participation in study costs, information on the enrolment process, evaluation criteria and criteria for the selection of applicants etc. The competition is publicly announced.
The College is advised to formalize in detail the regulations and procedure for proposing new study programmes, especially the ones for specialist graduate studies.	The procedure of designing a new study programme is described in document PSK 4 - Designing a new study programme (Quality Procedures).
All enrolment criteria and procedures are publicly available and applied on the basis of State Matura, but their effectiveness is not regularly analysed in terms of success.	In the period from 2013, students' pass rate with respect to the high school they have completed is analysed, as well as the number of students completing their studies at each individual study programme.
The College should pay more attention to informing students about the support system and the possibility of using counselling and mentoring for their benefit and further professional and personal development.	The College has a mentoring system in place as a professional support to students in their first year in order to help them to cope with study conditions. Information on mentors is published on the College's website. Mentors hold meetings with

	first-year students at the beginning of the academic year and are available for consultation during the semester.
Teachers' feedback to students should be improved, so that the latter can see the results of their proposals and complaints and therefore be provided with additional motivation.	Student representatives participate actively in the work of the Professional Council, the Council of each Department, the Quality Assurance Unit and other bodies. Student evaluation of teaching is regularly conducted through student surveys. They can do the same through the inbox for suggestions. Student representatives are members of the Committee for the periodic evaluation of study programmes and participate in the preparation of reports on the basis of data collected by teacher and student surveys.
Members of the Alumni club should be able to post information on the website of the College so that all information is visible to students as well as to the general public.	The Alumni club has been given access to the College's website where they can post relevant notices. The Alumni Club also activated a Facebook profile to facilitate and accelerate communication between club members and with other students, as well as the general public.
It is recommended that as of the following academic year, there should be at least two students in the Quality Assurance Unit (first or second year students). It is recommended that students' representatives at the Quality Assurance Unit be advised that they must communicate and collaborate with their colleagues and present their ideas, complaints, and thoughts at the meetings.	There are three students in the Quality Assurance Unit, one student from each department. Students are constantly encouraged to communicate and collaborate with colleagues and present ideas, complaints and reflections to meetings. Feedback from students confirmed that students' representatives communicate with them.
Work should be undertaken to inform the public about learning outcomes and employment opportunities for persons with a degree from the College of Slavonski Brod.	Learning outcomes are defined and made public on the website for all study programmes and individual courses, as well as in promotional leaflets containing information on employment opportunities. Analyses were made public on the website. The percentages for each undergraduate study indicate how many students continue their education, how many are employed, and how many are in the job search process. The College is working on a Newsletter and social networks (Facebook, Instagram) have been activated as channels of communication. Feedback from students confirmed that they receive this information at Info Days.
It is recommended to formalize plans for maintaining teacher to student ratios that will ensure the quality and sustainability of curricula.	Annual employment plans are prepared according to the needs of the teaching process. According to the teaching load, the teacher-student ratio and the actual needs of performing the activity, an annual plan is drawn up and consent is sought for opening new jobs. The teacher-student ratio did not exceed 1:30 in any year.
It is recommended that the College thoroughly analyses the workload of teachers and, based on the results of the analysis, introduces changes in order to align the workload with standards of teacher workload prescribed by the Basic Collective Agreement.	Harmonization was done under the new Collective Agreement for Science and Higher Education.

The College is encouraged to initiate and facilitate contacts with other institutions.	The College is constantly working to achieve inter-institutional cooperation, which is evident in the list of inter-institutional agreements with institutions at home and abroad. Since 2014, the College has also been implementing the CEEPUS mobility, and in 2019 it applied for KA107 and received mobility opportunities to countries where there was no cooperation so far.
It is recommended that the College continues to develop the Office for International Cooperation as a center for informing students and teachers on the possibilities of obtaining financial support through a number of European Union programmes.	The Office for International Cooperation encourages internationalization and promotes the College through the following activities: establishment of international cooperation and joint projects (Slovenia, Ukraine, Hungary...), planned publication of a "Student Guide" in English, visits to international fairs (Munich, Kiev, Tuzla, Bosanski Brod, Belgrade...), visits to relevant workshops (<i>Branding higher education institutions through quality</i>) and seminars (<i>Attracting foreign students</i>).
The College is advised to apply to European Union and CEEPUS network competitions in order to increase the mobility of teaching staff.	The College continuously announces tenders for the award of financial support as part of the ERASMUS+ programme. The College has achieved CEEPUS mobility and successfully applied mobility projects as part of KA107 project.
In order to achieve favourable conditions for teaching, the College is advised to provide its own rooms, lecture rooms, library and practicums, preferably in one location, to facilitate the use of all resources for students.	The activity of the College is carried out at a number of locations in Slavonski Brod in the leased premises of economic entities and units of local and regional self-government, since the College does not own its premises.
It is recommended that documents that set out clear rules for the training of non-teaching staff are prepared.	Rulebook on training and professional development of teaching and non-teaching staff.
Given the large number of locations, it is recommended that students be provided with internet access at all locations and that a person is employed to take care of the technical maintenance of the equipment, as this is currently done by teaching staff.	The College employs an IT technician in charge of equipment maintenance. Free Internet through Eduroam was introduced in the teaching rooms.
An expert should be employed at the library so that the services are at the level of the institution's status. Extending working hours would significantly increase the availability of titles to students and teachers. Considering that there are three study programs in three different scientific fields, the annual budget of HRK 20,000 for the acquisition of books should be increased.	A workday in afternoon hours was introduced into the library's office hours to improve library accessibility for users. As part of the Stem Eco & Energetics project, new literature titles worth HRK 62,885.60 were purchased. On July 1, 2019, the College signed a cooperation agreement with the Slavonski Brod Public Library, which defines cooperation in the field of library material use, cooperation in interlibrary borrowing, procurement of professional and other literature, organization of professional meetings, public forums, etc.

Complete the analysis of the effectiveness of the quality assurance system (including the SWOT analysis of the QAS) by early 2017 and inform stakeholders about it.	The Strategy of the College of Slavonski Brod 2018 - 2022 contains a SWOT analysis. The development strategy has been made public on the website of the College.
Regularly adopt, publish and implement annual quality plans and reports on their implementation (e.g. publish the Implementation of the Quality Plan for 2015, the Quality Plan for 2016 and for the next period).	The Quality Plan and the Implementation of the Quality Plan are created and published on the website.
Continuously, in a planned way, collect and use feedback from all stakeholders involved in the quality assurance activities of the study programs, with the aim of their improvement and update. Also use the collected information for a systematic, periodic review of learning outcomes and work methods for each subject.	Regular assessment is an activity undertaken by the specific College department implementing the programme. Course holders may submit proposals for minor changes to the study programme to the Head of Department. Proposals are considered by the Council of Department and an opinion is adopted on the acceptance of the proposal. Accepted proposals are referred to the Teaching and Student Commission for opinion and the Professional Council for further adoption. Within a period of four to six years, the process of internal evaluation (evaluation) of the study programme is initiated. The evaluation process results in a report that is analysed by the Professional Council, which is the basis for the preparation of the Self-evaluation Report for the whole College. Periodic evaluation of study programmes is part of the internal system for assurance and improvement of the quality of education at the College. Periodic assessment is a process involving external stakeholders with academic and/or professional experience. Activities include, among other things, meetings with students, teachers, businessmen and alumni representatives.
Periodically analyse the attractiveness of study programmes, the number of students enrolled, the success of completing their studies and students employment.	Analyses at the College have been carried out continuously since 2012. The Croatian Employment Service, Regional Office Slavonski Brod submits to the College data on the number of unemployed persons who have completed one of the study programmes of the College and are in the register of the CES.
Organize further teacher training on learning outcomes and their measurement.	A workshop on learning outcomes in professional studies was held in November 2018. All VuSB full-time teachers participated in the workshop.
Strengthen the activities of the Alumni Club and encourage members to take an active role in the development of new and improvement of existing study programmes and the positioning of the College.	In April 2019, a new association "VUSB Alumni Club" was founded. Members participated in the roundtable discussion <i>Improving and quality assurance of higher education at the College of Slavonski Brod in line with the needs of the economy</i> .
Consider opportunities for continuous improvement of teacher competences (regular participation in education, workshops, seminars either organized by the College or other higher education institution), especially for external	In January 2019, a new Rulebook on the training and professional development of teaching and non-teaching staff was adopted. College organizes and conducts trainings in order to improve the teaching competences of

associates, junior teaching staff and those teachers who are poorly evaluated in student surveys.	its employees (example: Basics of e-learning, September 2019).
Consider the possibilities of formal annual planning for participation in professional meetings and conferences (shorter and longer stays outside the institution and abroad), as well as evaluations of the realized training. Continually evaluate the success of such activities and evaluate contributions to the development of teaching resources.	An annual training plan for the teaching staff and evaluation of the completed training are developed.
Continue the good practice of regularly informing students on the mobility and sharing direct experiences of students who have participated in exchange programmes.	The Erasmus + Info Day is regularly held at the College. The website of the College contains information related to mobility programs as well as current competitions.
Consider introducing disciplinary action in the event of a violation of academic integrity.	Rulebook on disciplinary responsibility of VUSB teachers and associates and Ethical codex are adopted, and Disciplinary courts for students and teachers are appointed.
Systematically publish the analyses of surveys of students, teachers, economy and other relevant stakeholders (e.g. alumni).	Surveys are continuously conducted, and comments from the Vice-Dean for Academic Affairs are published on the website.
Ensure regular functional communication with external stakeholders, as well as informing the community and the regional economy about the activities of the College.	Information on the activity of the College are transparent. They are published on the website of the College, through the organization of round tables, media appearances, through social networks, etc. The VuSB <i>Newsletter</i> and the Student Gazette are planned to be launched.

The person exclusively responsible for performing duties pertaining to the quality assurance system terminated the employment by mutual agreement and therefore these duties have been redistributed. The Panel deems that VuSB has to employ a new person as soon as possible and advises to prepare the Rulebook on rewarding, just as the Dean said they were planning to.

Recommendations for improvement

Employ a person responsible for performing duties pertaining to the quality assurance system. For the purpose of development of the rewarding system for scientific research excellence, prepare the Rulebook on rewarding.

Quality grade

Satisfactory level of quality

1.3 The higher education institution supports academic integrity and freedom, prevents all types of unethical behaviour, intolerance and discrimination.

Analysis

Evidence gathered: Rulebook on disciplinary responsibility of teachers and associates of the College of Slavonski Brod, Ethical codex, Rulebook on disciplinary responsibility of students, Implementation of plagiarism detection software (AntiPlagiarism.net), Decision to appoint an Ethics Committee and Decision to establish disciplinary courts for teachers and associates of the College of Slavonski Brod.

The following elements of the standard are realised: The Panel agrees that VuSB has satisfactorily solved the question of ethical behaviour of all institution's stakeholders by adopting the Ethical codex, the Rulebook on disciplinary responsibility of teachers and associates of the College of Slavonski Brod and the Rulebook on disciplinary responsibility of students. Moreover, subject matters are also covered in the Rulebook on Study at the College of Slavonski Brod (dated December 2018), as well as the Rulebook on Work.

It is evident that all necessary and relevant documents have been produced, adopted and implemented in practice. In compliance with the Rulebooks, VuSB has also established procedures for the implementation of ethical practices by appointing the Ethics Commission, the Higher Disciplinary Tribunal for Teachers and Associates, the Disciplinary Tribunal for Students of the College of Slavonski Brod and the Higher Disciplinary Tribunal for Students of the College of Slavonski Brod, all of which operate within the permanent working bodies of the Professional Council of the College. The Panel couldn't examine the activities carried out by these bodies because there were no procedures for unethical behaviour initiated in the last five years. The purchase and use of a plagiarism detection software Antiplagiarism.net probably contributed to the creation of this situation; according to the teachers, the software is regularly used to check final papers as well as seminars and articles published in the Review of the papers of the College of Slavonski Brod.

Recommendations for improvement

Continue to support academic integrity and freedom by organising round table discussions on the subject matter, inviting external lecturers and similar. Openly discuss ethics and remind VuSB stakeholders of the importance of ethical behaviour and reporting of unethical conduct.

Quality grade

Satisfactory level of quality

1.4 The higher education institution ensures the availability of information on important aspects of its activities (teaching, professional and/or scientific and social role).

Analysis

Evidence gathered: Evidence gathered during the site visit and indicators from the Self-evaluation report: Promotion plan for secondary schools, website of College of Slavonski Brod, social networks of the College of Slavonski Brod, quantitative promotion indicators (SER Annex 1.4), presentation at reviews and fairs, brochures, posters and examples of public action and practice.

The following elements of the standard are realised: It was established that VuSB continuously publishes information about its activities by means of various media. In doing so it follows the 2018 Communication and Publicity Strategy. On the website, which was redesigned in 2019, it is possible to find relevant information concerning the College, study programmes, projects, cooperation and internationalisation. Information is also being published on accounts at social networks such as Facebook (College of Slavonski Brod, Student Council and Alumni Club) and Instagram. VuSB's activities are accompanied also by local media, in particular by publishing information about enrolment, study programmes and other activities carried out by the institution. The HEI publishes information on social media rather promptly and frequently, but this practice could be improved with more active forms of communication (web forum and sim.) that have other purposes than just collecting "likes".

Recommendations for improvement

Upgrade the English version of the website as soon as possible, including the documents available through a link. Continue to stimulate activities aimed at increasing the recognisability of VuSB and its presence among the general public, also by including new communication means such as YouTube and LinkedIn. Information about all VuSB's activities is being published quite frequently on the HEI's Facebook page, but this information could be made even more interactive, for example through quizzes, questions, short videos filmed during lectures and similar, in order to attract and involve readers/viewers.

Quality grade

Satisfactory level of quality

1.5 The higher education institution understands and encourages the development of its social role.

Analysis

Evidence gathered: Evidence gathered during the site visit and indicators from the Self-evaluation report: joint voluntary actions of students and staff of the College – voluntary blood donation, implementation of lifelong learning programmes, partnership in the project aimed at strengthening the adult education sector, partnership in the project aimed at increasing the employability of target groups, partnership in the project Initiative of the Private Sector for the Youth, voluntary actions to collect funds for the socially disadvantaged, public involvement of employees in the profession: public lectures, media appearances, feedback from stakeholders and VuSB's social media accounts.

The following elements of the standard are realised: VuSB is sufficiently integrated in the local community, understands and encourages the development of its social role by carrying out activities in the field of lifelong learning – namely those concerning vocational training and upskilling of persons conducting energy audits and energy performance certification of buildings. College employees organise round table discussions and public lectures. There is nevertheless room for improvement in, for example, a more active participation in voluntary and humanitarian actions. It is also recommended to seek to evenly distribute voluntary activities among all institution's stakeholders.

Recommendations for improvement

A more active participation of VuSB in humanitarian and voluntary actions organised by the City and the County; organisation of innovative ways of providing help. Even distribution of voluntary activities among all VuSB's stakeholders and encouragement of student participation in these actions.

Quality grade

Satisfactory level of quality

1.6 Lifelong learning programmes delivered by the higher education institution are aligned with the strategic goals and the mission of the higher education institution, and social needs.

Analysis

Evidence gathered: Evidence gathered during the site visit and indicators from the Self-evaluation report: surveys on satisfaction of lifelong learning programmes students,

authorisations VuSB has obtained for the implementation of its lifelong learning programmes, reports on the implemented lifelong learning programmes, quality assurance system procedures on lifelong learning, Decision on the appointment of lifelong learning programme coordinator, Strategy of the College of Slavonski Brod 2018-2022 (Chapter 3), mission and vision of the College of Slavonski Brod, feedback from stakeholders.

The following elements of the standard are realised: The Panel concluded that VuSB is very active in conducting lifelong learning programmes in the field of energetics, vocational training of persons conducting energy performance certification of buildings, and foreign languages. Moreover, it provides lifelong learning programmes in the field of informatics (CISCO, JAVA and Microsoft tools) and agriculture (training for manager of an agritourist farm). VuSB continuously improves existing programmes and analyses the needs of economy by consulting businessmen, the Panel suggests to continue actively seeking new possibilities in different fields. Businessmen could discuss the problems they face with students and encourage them to apply innovative ways of thinking to concrete situations, which would benefit both businessmen and students. In the field of management there are also lots of opportunities for developing and organising different forms of lifelong learning such as short training programmes in the field of communication, management, leadership, project expertise etc., aimed at professionals and businesses alike. This could also provide an opportunity to enlarge the fund of potential candidates for the enrolment in higher education programmes. The Panel suggests creating a place for students where they could plan innovative projects and start-ups and thus acquire additional knowledge, which might be useful for their personal entrepreneurship. This could also enhance the connection between students and their involvement in the alumni club, once they graduate.

Recommendations for improvement

Within the HEI's capabilities, invite as many practitioners as possible to discuss problems they face in their companies at lectures and seminars, thus giving to students the opportunity to learn about current and concrete examples. Development of short training programmes in the field of management for owners and employees of small companies, so that they can enhance their competencies and acquire new knowledge. Establishment of a start-up hub with the purpose of connecting students from different fields and enabling the realisation of innovative projects and ideas.

Quality grade

Satisfactory level of quality

II. Study programmes

2.1 The general objectives of all study programmes are in line with the mission and strategic goals of the higher education institution and the demands of the labour market.

Analysis

Evidence gathered: Self-evaluation Report, feedback from the Management, external stakeholders, students, examination of the justifiability analysis of all study programmes of the College, data on the employability of graduates, letters of support for the launching and development of study programmes of the College.

The following elements of the standard are realised: The College possesses sufficient spatial and human resources to carry out all its study programmes, in accordance with the applicable prescribed parameters (minimum 1,25 m² per student, teacher/student ratio between 1 : 15 and 1 : 30, coverage of teaching with own teachers greater than 1/3). The justifiability of study programmes is in accordance with the recommendations of the Croatian Employment Service's regional county departments for educational enrolment policy as well as the recommendations of professional associations.

The general objectives of the undergraduate professional study programme in Management are aligned with the mission and strategic goals of VuSB, as well as with the needs of the labour market. The general objectives of the specialist graduate professional study programme in Management are aligned with the mission and strategic goals of VuSB, but are not aligned with the needs of the labour market because they are overly broad and general, and they are not fully compliant with the regional economical structure.

Recommendations for improvement

Reduce the quantity of *ex cathedra* teaching (lectures). Increase the number of hours of professional practice and seminars presented by students. Include the laboratory and practical part of teaching. In the study programme executive plans, each teacher shouldn't participate in (or be the holder of) more than three courses. Consider developing new study programmes (digital or precise agriculture or agrotechnical ameliorations of agricultural areas).

The establishment of general objectives of the specialist graduate professional study programme in Management should be based on the needs of the local labour market, dominated by segments of agriculture and industry.

Quality grade

Satisfactory level of quality

2.2 The intended learning outcomes at the level of study programmes delivered by the higher education institution are aligned with the level and profile of qualifications gained.

Analysis

Evidence gathered: Self-evaluation Report, insight into feasibility studies of undergraduate and graduate study programmes, feedback from course holders and students.

The following elements of the standard are realised: Study programmes are developed following the Standards and Guidelines for Internal Quality Assurance in the European Area and correspond to level descriptors of the Croatian Qualifications Framework. All College teachers attended in November 2018 an education on learning outcomes titled *Teaching and Evaluation Focused on Learning Outcomes*. The minimum number of ECTS credits awarded to a set of learning outcomes is respected (level 6.a and 7.1.a – 180 and 120 ECTS credits). The foreseen learning outcomes of each course contribute to the achievement of learning outcomes of undergraduate professional study programmes in the field of Plant Production.

Undergraduate professional study programme in Production Engineering

The foreseen learning outcomes of the undergraduate professional study programme in Production Engineering correspond to qualification level 6 of the CROQF. Upon completion of the study programme, students are awarded the title Bachelor of Science (*Baccalaureus/a*) – Mechanical Engineer and 180 ECTS credits. There is balance between theoretical and practical teaching, and that is also true for learning outcomes of individual courses. Students acquire practical knowledge in laboratories at the Faculty of Mechanical Engineering and the Đuro Đaković factory, as well as by completing a professional practice in the duration of 150 hours. The examination of final papers showed that their quality corresponds to the study programme level. Upon completion of the study programme, students can continue their studies by enrolling the appropriate specialist graduate professional study programme.

Specialist graduate professional study programme in Energetics

By examining the study programme's feasibility study, the Panel established a list of obligatory and elective courses and the number of hours and ECTS credits envisaged for each teaching activity. In the chapters 4.1.1. to 4.1.3. there are separate descriptions for each course; they contain general information about the course and the course's description. The description of the course includes, among other things, the aims, content and expected learning outcomes of the course. After a thorough examination of the syllabi of all courses and their learning outcomes, the Panel concluded that the learning

outcomes of each course contribute to the achievement of the learning outcomes at the level of the study programme, as defined for the specialist graduate professional study programme in Energetics under the point 3.16. in the study programme's feasibility study. Competencies acquired upon completion of the study programme result from the courses' syllabi and are in accordance with the competencies listed under point 3.16. of the study programme's feasibility study. The overall conclusion is that the learning outcomes correspond to level descriptors of the CROQF and the EQF at the level on which the study programme is delivered; furthermore, the realised elements of the standard are connected with learning outcomes that are in accordance with the requirements of the profession and internationally recognised standards. Upon analysing the study programme, it is possible to conclude that the learning outcomes reflect the competencies needed to enter the labour market and to continue education.

Undergraduate professional study programme in Plant Production

The foreseen learning outcomes of the undergraduate professional study programme in Plant Production (fields Horticulture and Crop production) correspond to the level and profile of the qualifications gained upon completion of the study programme.

Specialist graduate professional study programme in Ecological Agriculture and Rural Development

The foreseen learning outcomes of the specialist graduate professional study programme in Ecological Agriculture and Rural Development correspond to the level and profile of the qualifications gained upon completion of the study programme. The minimum number of ECTS credits awarded to a set of learning outcomes is respected (level 7.1.a – 120 ECTS credits).

Undergraduate professional study programme in Management

The foreseen learning outcomes of the undergraduate professional study programme in Management correspond to the level and profile of the qualifications gained upon completion of the study programme.

Specialist graduate professional study programme in Management

The Panel regards the foreseen learning outcomes of the specialist graduate professional study programme in Management as too optimistic. The Panel suggests to shift the focus of the study programme onto a few narrower fields, such as specialisations in marketing, accounting, production management and similar. The main purpose of a specialist study programme should be to broaden one's knowledge of a certain narrow field, and not to familiarise with the entire spectrum of management. It is hard to believe that a few dozen hours of lectures are enough to acquire a sufficiently profound knowledge of all these fields and achieve all the envisaged learning outcomes.

Recommendations for improvement

Align the learning outcomes of certain courses (undergraduate professional study of Horticulture: Agroecology, Fundamentals of Plant Production and Climatology, Mechanisation in Horticulture, Wine and Horticultural Products; undergraduate professional study of Crop Production: Fundamentals of Agricultural Engineering; specialist graduate professional study of Ecological Agriculture and Rural Development: Mechanisation in Ecological Agriculture, Ecological Agriculture and Rural Tourism, Ecological Horticulture, Alternative Methods of Plant Breeding) with the name of the course. For all courses, specify the compulsory literature required for passing the exam. Encourage the staff to write notes for internal usage – be it peer-reviewed or just handwritten. In this way, extensive literature for certain courses would be replaced, and for other courses where obligatory literature is not defined these notes could be used as study material.

Harmonise the teaching structure of certain courses of the specialist graduate professional study of Energetics – Steam Generators, Heat Exchangers, Materials in the Energetics Sector, Thermal Turbines, Electric Motor Drives, Energetics and Environmental Protection – so that the ratio between the theoretical part (lectures) and exercises/practical work is at least 1:1, and if possible, in favour of practical teaching. For the course in Strength of Energy-related Equipment, define in a clearer way the learning outcomes in accordance with the course's content. Learning outcomes of the course in Thermal Power Plants should result in calculations of parameters and design of specific components or integral systems, and not only in their description and explanation. All learning outcomes of the course in Energetics and Environmental Protection come down to descriptions and explanations, which is also the case for the majority of learning outcomes of courses in Cooling Techniques, Energy Storage Techniques and Maintenance of Power Generating Plants, and therefore it is necessary to better define them so that they ensure the achievement of practical knowledge and skills.

The HEI should consider a thorough review of the structure of the existing specialist graduate professional study programme in Management in the direction of a more concentrated modular offer of only a few fields, which are strongly needed by the local economy, in order to increase the study programme's attractiveness to students.

Quality grade

Minimum level of quality.

2.3 The higher education institution provides evidence of the achievement of intended learning outcomes of the study programmes it delivers.

Analysis

Evidence gathered: Self-evaluation Report, feedback from employers, feedback from graduates and written evidence of participation of graduates in various round table discussions or workshops.

The following elements of the standard are realised: The Panel has a good opinion on the achievement of the envisaged learning outcomes. Teachers are continuously encouraged to improve the quality of the teaching, i.e. knowledge and skills. The College encourages the use of e-learning and the pass rates of each course are monitored. The HEI continuously collects feedback on the quality of students from employers.

Recommendations for improvement

Continue to regularly encourage teachers' upskilling through the acquirement of new scientific and professional knowledge (for example, thanks to an outgoing mobility) and by mastering new teaching techniques (distance learning) as well as presentational and communicational skills.

Quality grade

Satisfactory level of quality

2.4 The HEI uses feedback from students, employers, professional organisations and alumni in the procedures of planning, proposing and approving new programmes, and revising or closing the existing programmes.

Analysis

Evidence gathered: Insight into regular and periodic evaluation of study programmes. Participation of the College in the organisation of appropriate events such as *Croatian Traditional Flavours Days*, *Florafest* or *Mechanical technologies in the production of welded constructions and products* and sim. Participation in the organisation of round table discussions, for example the round table *Improvement and Quality Assurance of Higher Education at the College of Slavonski Brod in accordance with the needs of the economy*.

The following elements of the standard are realised:

The College gathers information at the abovementioned events as well as from other external stakeholders or regional/local authorities. On the basis of gathered information/evidence, new study programmes are developed, for example the specialist graduate professional study programmes in Energetics and Ecological Agriculture and

Rural Development. These study programmes took into account the need to acquire contemporary knowledge and skills adapted to the current labour market, based on the strategic goals of the public sector at local level.

Recommendations for improvement

Continuously adapt the existing study programmes to the needs of the economy and the labour market; encourage the acquisition of skills through practical work; encourage the development, improvement and provision of counselling and professional services and educations in topics from the HEI's field of activity, in order to meet the needs of the market, the economy and other institutions.

Quality grade

Satisfactory level of quality

2.5 The higher education institution ensures that ECTS allocation is adequate.

Analysis

Evidence gathered: insight into study programme executive plans, feedback from course holders, feedback from current and former students and employers.

The following elements of the standard are realised:

The College carries out a survey for the periodic evaluation of study programmes; it acts on the feedback from the student survey; ECTS credits are allocated to professional practice and practical teaching. Based on recommendations from the first cycle of evaluations, the College undertook the evaluation of elective courses. At the second year of the undergraduate study programme in Plant Production, Elective Courses I and II were introduced, with a total of 6 ECTS credits. At the third year of the study programme in Plant Production, Elective Courses III and IV were introduced, with a total of 5 ECTS credits. Moreover, on the basis of suggestions from the teachers and students survey, the teaching workload of the course in Physical and Health Education was increased by 1 ECTS credit.

Recommendations for improvement:

Continue to regularly carry out surveys after each semester. Increase the number of ECTS credits achieved through professional practice. Evaluate thoroughly student's seminars and presentations on topics related to a certain modul. Evaluate practical solutions and ideas students come up with while solving a problem.

Quality grade

Satisfactory level of quality

2.6. Student practice is an integral part of the study programmes.

Analysis

Evidence gathered: Self-evaluation Report, feedback from the Management, external stakeholders and students.

The following elements of the standard are realised: The College adopted a Decision providing that professional practice is a compulsory and integral part of the teaching process at all study programmes delivered by the College. The College has a Rulebook on professional practice. One part of the professional practice can be completed abroad as part of the Erasmus+ programme or in the so-called partner countries that are not members of the Erasmus+ programme. Each student has a mentor that draws up a professional practice programme (diary) in consultation with the professional practice leader. Upon completion of the professional practice, students present the results to the mentor and other students of the College.

Recommendations for improvement

Organise and encourage the completion of professional practice through a student outgoing mobility abroad. Include graduate students in the promotion of professional practice completed abroad to undergraduate students. Connect the drawing up of the final paper with the completion of professional practice. Reward teachers that write a scientific paper and present it at a conference or symposium, on the basis of a completed professional practice and a consequently written final paper.

Quality grade

Satisfactory level of quality

III. Teaching process and student support

3.1 Admission criteria or criteria for the continuation of studies are in line with the requirements of the study programme, clear, published and consistently applied.

Analysis

Evidence gathered: Self-evaluation Report, feedback from the Management, Study Rulebook, Student Enrolment Competition, Rulebook on the recognition of foreign higher education qualifications, Decision to recognise ECTS credits and grades acquired at other higher education institutions. Tables: 3.1 Number of students per study programme, 3.2. Structure of enrolled students and interest in undergraduate study programmes and 3.3. Structure of enrolled students and interest in graduate study programmes (MOZVAG).

The following elements of the standard are realised: Upon examining the submitted documentation and on the basis of the Management's feedback, and by browsing through the website of the College where clear criteria for the enrolment or the continuation of studies are published, the Expert Panel concluded that the aforementioned criteria are consistently applied. The HEI has established decision-making procedures for the enrolment criteria and has also defined the distinctive courses students need to pass in order to enrol in specialist study programmes. Moreover, there exist clearly defined criteria for enrolment or continuation of studies that ensure the selection of candidates with appropriate background that is aligned with the requirements of the study programme. The College has an effective mechanism for recognizing ECTS credits and grades acquired at other higher education institutions. The HEI carries out student surveys on their experience of the procedure of recognition and transition from other higher education institutions. Table 3.2. Structure of enrolled students and interest in undergraduate study programmes clearly shows that the average high school performance grade ranges from 3,0 to 3,5 depending on the study programme and that the completion percentage of the obligatory part of state matura ranges from 50 % to 58 %. Table 3.3. Structure of enrolled students and interest in graduate study programmes shows that the average grade achieved at the previous study level ranges from 3,0 to 3,45.

Recommendations for improvement

The HEI should carry out a more in-depth analysis of students' performance throughout their studies depending on the enrolment criteria or criteria for the continuation of studies, and in relation to the average high school performance grade as well as the students' performance at the state matura and at the previous study level and/or previously attended study programme. In cooperation with high schools, the HEI should actively participate in the pupils' state matura preparation classes. The HEI should organise preparation classes and/or additional teaching for students with limited

foreknowledge acquired in high school in order to increase pass rates and improve students' performance throughout their studies, which would result in a better average performance grade at the undergraduate study level.

Quality grade

Satisfactory level of quality

3.2 The higher education institution gathers and analyses information on student progress and uses it to ensure the continuity and completion of study.

Analysis

Evidence gathered: Self-evaluation Report, feedback from the Management, Decision on the assignment of mentors to students of all study programmes, Dean's Decisions on distinctive courses for each particular student, Professional Council's Decisions to accept changes to study programmes, Mentor's Reports on interviews with the students, feedback from students regarding the implementation of the mentoring system, Table 3.4. Pass rates in study programmes and Table 3.5. Completion and drop-out rates across all study programmes, re-accreditation of the College in 2012.

The following elements of the standard are realised: On the basis of the feedback from the Management, teachers and students, it is apparent that student progress is being monitored through a mentoring system. All study programmes have mentors whose task is to monitor student progress, i.e. each teach/mentor is assigned to a group of students depending on the type of study programme and the study year. At the end of the semester, mentors analyse the collected data, which comprises the number of ECTS credits acquired per semester and information regarding student attendance of lectures as confirmed by all teachers, and on the basis of this data they invite students to advisory/motivational interviews. Students are introduced to the aforementioned procedure at the beginning of the academic year. This part of the procedure has been significantly improved in comparison to the information from the 2012 Report on the re-accreditation of the College. From Tables 3.4. and 3.5. it is apparent that a large number of enrolled students drops out of college and that the completion percentage is below 50 %. Stakeholders provided feedback on this issue stating that one of the reasons for dropping-out of college is that students enrol in a certain study programme just to obtain student rights (work via the Student Service, survivor's pension, health insurance and sim.). In order to increase pass rates, students who have enrolled specialist graduate professional study programmes and have not previously completed the same undergraduate study programme are required to pass distinctive courses throughout two years of the graduate study.

Recommendations for improvement

In order to reduce drop-out rates, it is necessary to carry out an in-depth analysis of data on student progress, consider introducing preparatory classes for students enrolling undergraduate study programmes and organise meetings between mentors and students in the middle or during the semester, and not only at the end of the semester, given that information on student attendance and pass rates of partial exams are available.

Quality grade

Satisfactory level of quality

3.3 The higher education institution ensures student-centred learning.

Analysis

Evidence gathered: Self-evaluation Report, feedback from the Management, Heads of Departments, teachers and students, study programme executive plans for 2019/2020, surveys for the evaluation of teachers for 2019/2020, Ethical Codex, Decision on the teaching workload of part-time students in 2019/2020, Report on the workshop *Management of changes*, held on 8.11.2018, Report on the visit to the Faculty of technologies and systems in Novo Mesto, Slovenia.

The following elements of the standard are realised: The higher education institution encourages various modes of programme delivery, in accordance with the intended learning outcomes. These include the following teaching methods: lectures, laboratory and/or auditory practice, seminars, practical work of students, as well as visits to various economic/industrial operators. From the feedback provided by the College's external stakeholders, subjects in the real sector, it is evident that creative problem solving and individual and group work are being encouraged. Based on feedback from the Management and teachers, it is apparent that study programmes are being revised every four to six years. The modes of programme delivery are being continuously adapted through minor changes of study programmes. Teaching methods are adapted to the needs of part-time students who attend lectures in the afternoon and on Saturdays. The approach to teaching students with disabilities is individually adapted, i.e. on a case-by-case basis. Life long learning programmes are adapted to senior students and to students working in certain industries. The HEI uses an e-learning system called *Merlin* on which some teaching materials are available and which is used, along with e-mails, as a communication tool for teachers and students. According to feedback from students, the availability of teachers is visible from the practice of holding consultations via various communication channels such as e-mail, mobile phone and even social media, which results in high levels of student satisfaction and motivation. Reports on completed

evaluations of teachers and teaching methods show that students are satisfied with the adopted teaching methods. Depending on the study programme, the independence and responsibility of students is encouraged by the use of different modes of programme delivery: field trips, writing seminars and project proposals, completion of professional practice and writing final papers.

Recommendations for improvement

It is apparent from the analysis of study programme executive plans that for certain courses, it is necessary to harmonise the number of hours of theoretical teaching (lectures) with the number of hours of laboratory/auditory practice in order to shift the focus on students' practical work because the HEI delivers professional studies. The evaluation of modes of programme delivery should be carried out periodically (annually) on the basis of survey results and propositions made by professional colleges.

Quality grade

Satisfactory level of quality

3.4 The higher education institution ensures adequate student support.

Analysis

Evidence gathered: Self-evaluation Report, feedback from the Management, Heads of Departments, teachers, students, administrative and technical staff, visit to laboratories and teaching facilities, information package on the transfer of ECTS credits for the academic year 2019/2020, College's website, Statute of the Student Council of VuSB, Rulebook on financing of the Student Council and student programmes, Rulebook on international mobility at VuSB, Report on the ERASMUS+ Info Day, held on 23.5.2019, Rulebook on conditions and manner for exercising the right to a scholarship of the College of Slavonski Brod.

The following elements of the standard are realised: From the Self-evaluation Report and the interviews that have been carried out, it is visible that VuSB organises a ceremonial beginning of the new academic year for students of the first year of undergraduate professional studies; on this occasion, students meet the Management and the representatives of student organisations and are introduced to the organisation and the proceedings of the College. Once a year, the Vice Dean for Academic Affairs invites all students to a meeting to inform them about new decisions and rulebooks, which concern students in particular. The information package containing relevant information is available on the College's website. The continuous counselling of students is provided through the aforementioned mentoring system. Students are also assigned with a mentor at the teaching facilities where they complete their professional practice; the role of the

mentor is to guide, supervise and help students to focus. At the VuSB's Open Day, students have the opportunity to talk with business men in order to receive professional orientation. From the Self-evaluation Report and the interviews that have been carried out, it is visible that VuSB provides psychological counselling to students (information is available also on the College's website), systematic medical examination for all full-time first-year students and, in cooperation with the Career Information and Counselling Centre in Slavonski Brod (CISOK), provides information on professional orientation and career development. The HEI envisages the establishment of a Career Office and the employment of one expert to carry out its activities. The College has a Student Council whose members are also members of the Professional Council, and a Sports Association of the College of Slavonski Brod whose aim is to improve student's quality of life. The approach to students with disabilities is personalised depending on the type and degree of disability. Teachers are informed about the enrolment of students with disabilities before the beginning of the academic year and adapt their teaching methods upon previous agreement with these students. The College also provides financial assistance for students of lower socio-economic status (Decision on scholarship award). In their feedback, students pointed out their satisfaction with the availability of teachers thanks to consultation hours and their quick response to all enquiries through e-mail or social media. The International Cooperation Office is active at the College to assist students in matters related to ERASMUS+ and CEEPUS programmes; students described the Office's work as excellent. Students have at their disposal the College Library, the Library of the Faculty of Mechanical Engineering and the City Library. Administrative and technical staff is qualified and provides students with all the necessary support; students are satisfied with the work of the administrative offices.

Recommendations for improvement

No recommendations.

Quality grade

High level of quality

3.5 The higher education institution ensures support to students from vulnerable and under-represented groups.

Analysis

Evidence gathered: Self-evaluation Report, feedback from the Management, Heads of Departments, teachers and students, Agreement on Programme Financing of College of Slavonski Brod in the academic years 2015/16, 2016/17, 2017/18, 2018/19, 2019/20, 2020/21 and 2021/22, Rulebook on conditions and manner for exercising the right to a scholarship of the College of Slavonski Brod, VuSB's Ethical Codex.

The following elements of the standard are realised: The College monitors the various needs of students from vulnerable and under-represented groups. Applicants with a disability degree of 60 % and more are entitled to the direct enrolment in regular study programmes outside the enrolment quota. An individual approach to programme delivery and evaluation of learning outcomes is adopted with students with disabilities. So far, two students with disabilities have studied at the College, in examination (written and oral) and presentation of seminars they were allowed to take longer time for writing or presenting their opinion, and also the font of exam questions was increased. The College has a smart board in its library as a means of support to students in the teaching process. Teaching is adapted to the needs of part-time students who attend lectures in the afternoon and on Saturdays. Within the other underrepresented groups of students (senior students, students whose parents have lower levels of education, female students in the technical field etc.), the College in accordance with the Ethical Codex does not make any difference because it is required to respect the dignity of students, regardless of their ethnic origin, race, gender, age, marital status and political, religious or other affiliation. In the framework of providing support to students from underrepresented groups, the College annually awards scholarships to full-time students of lower socio-economic status in accordance with the Rulebook on conditions and manner of exercising the right to a scholarship of the College of Slavonski Brod. Students who pay tuition fees on their own have the possibility to pay in six monthly instalments.

Recommendations for improvement

Increase the accessibility of the premises for persons with disability by providing a wheelchair ramp in the entrance area, adapting the facilities and enabling unrestricted access within the building, in compliance with the Act on Accessibility of Buildings for Persons with Disability and Decreased Mobility (OG 151/2005). Depending on the type and degree of disability, the HEI should purchase appropriate teaching tools such as customised computers and equipment with the corresponding software.

Quality grade

Satisfactory level of quality.

3.6 The higher education institution allows students to gain international experience.

Analysis

Evidence gathered: Self-evaluation Report, feedback from the Management, staff of the Office for International Cooperation and students, Rulebook on international mobility, list of inter-institutional agreements, experiences of students that participated in the

mobility programme – published on the VuSB’s website, Table 3.6. Total student mobility in the past five academic years, website of the College of Slavonski Brod.

The following elements of the standard are realised: The College is making considerable efforts in order to enable students to gain international experience through participation in ERASMUS+ and CEEPUS programmes. At the beginning of each academic year, an ERASMUS+ Info Day is held where students, teaching and non-teaching staff receive all the necessary information regarding international mobility. At the ERASMUS+ Info Day, students and teachers that participated in an international mobility programme during the previous academic year present their experience and encourage other students to participate in the aforementioned programmes. So far, a total of 16 students of the College of Slavonski Brod participated in an ERASMUS+ outgoing mobility programme and two students participated in a CEEPUS outgoing mobility programme. Currently, the HEI has 31 signed agreements with complementary higher education institutions abroad. The College supports students in applying for and implementing exchange programmes by helping them to find a higher education institution or a business and accommodation. The College ensures the recognition of ECTS credits acquired at other higher education institutions through the ERASMUS+ coordinator’s evaluation and comparison of study programmes, courses, grades and ECTS credits at the foreign HEI with study programmes delivered by VuSB. The College of Slavonski Brod is the first college in Croatia to achieve mobility through the CEEPUS mobility programme (in 2014), thereby confirming that the HEI is making great efforts to increase the quality of studying when it comes to gaining international experience. The College collects data on student satisfaction with the quality of the support provided in dealing with practical aspects of the mobility; upon their return, students write reports and hold presentations on the experience they gained. The collected experiences and data are published on the College’s website. During their studies, students broaden their international experience by reading additional literature in foreign languages, listening to lectures held by professors from abroad and exchanging experiences with foreign students on incoming mobility programmes.

Recommendations for improvement

No recommendations.

Quality grade

High level of quality

3.7 The higher education institution ensures adequate study conditions for foreign students.

Analysis

Evidence gathered: Self-evaluation Report, feedback from the Management, staff of the Office for International Cooperation and students, Table 3.6. Total student mobility in the past five academic years, website of the College of Slavonski Brod.

The following elements of the standard are realised: Students can find basic information in English language on the College's website as well as the contacts of the Office for International Cooperation and the ERASMUS+ and CEEPUS coordinators. A completely new webpage in English language is currently being developed. The College provides support to foreign students in the application process and while studying and living in Slavonski Brod through the work of the Office for International Cooperation and the student administration office. International students have the opportunity to stay in the dormitory of the Student Center. So far, four students from Belgium completed an incoming mobility. As a result of these mobilities, students wrote their final papers. Incoming students expressed their satisfaction with the realised mobility and they developed a promotional leaflet on the College which they also presented in Belgium. For the purpose of increasing incoming mobility of students, the College participated in education fairs in Munich (Germany), Belgrade (Serbia), Kiev (Ukraine) and other similar activities in Budva (Montenegro), Tuzla, Sarajevo, Bosanski Brod (Bosnia and Herzegovina). The College offers to students two specialist programmes in English language (Management and Energetics) developed as part of a project on internationalisation of education.

Recommendations for improvement

It is necessary to complete the development of the webpage in English and publish the list of all courses offered to foreign students and the appropriate literature. The HEI should increase the number of students on incoming mobility.

Quality grade

Satisfactory level of quality

3.8 The higher education institution ensures an objective and consistent evaluation and assessment of student achievements.

Analysis

Evidence gathered: Self-evaluation Report, study programme executive plans, feedback from the Management, teachers, students and staff of the student administration office,

Rulebook on student assessment, information package for transfer of ECTS credits, survey on student's evaluation of teaching, Table 3.4. Pass rates in study programmes.

The following elements of the standard are realised: Tables containing the description of each course, assessment and evaluation criteria, learning outcomes, required literature and manner of examination are published on the College's website. Feedback from students and teachers confirmed that the first lecture of each course is dedicated to informing students on evaluation criteria, which are clearly defined in the executive plans and harmonised with the used teaching methods. Exam results are published on the website under student's ID number and so far, there have been no complaints from student that would demand to initiate committee proceedings, which are clearly defined. Students not satisfied with the attained grade and the evaluation method can, within 48 hours after the exam took place, file a complaint and request taking the exam in front of a committee of teachers. The College is attentive to putting value on the work of students during programme delivery and the final exam; all teachers are familiar with how the study system works and they have established clear evaluation criteria. The work of students is evaluated and assessed through the following activities: continuous monitoring during the teaching process, colloquiums (partial exams), written and oral exams. The oral part of the exam contributes to the development of critical thinking among students and their communicational skills as well as the assessment of achieved learning outcomes. The students' work evaluation and assessment procedures take into account particular circumstances for certain groups of students, as in the adaptation of examination procedures to students with disabilities. Nevertheless, from the available documentation and the gathered evidence, it is not apparent that VuSB provides support in the development of skills related to examining and testing methods, conducts evaluation of the assessment of students' work and that it provides student with feedback in order to improve students' performance at exams and the overall pass rates.

Recommendations for improvement

The College should carry out activities aimed at providing support to the development of skills related to examining and testing methods; it should also establish appropriate procedures in order to guarantee the objectivity and reliability of evaluation, such as double evaluation and metaevaluation, given that the analysed data from Table 3.4. *Pass rates in study programmes* indicate high drop-out rates. Teachers at courses with lower pass rates (below 50 %) should provide study advice to their students in order to increase pass rates.

Quality grade

Satisfactory level of quality

3.9 The higher education institution issues diplomas and Diploma Supplements in accordance with the relevant regulations.

Analysis

Evidence gathered: Self-evaluation Report, feedback form the Management and staff of the student administration office, Rulebook on the content and form of diplomas, Certificate of completion of study (diploma and supplementary certificates).

The following elements of the standard are realised: After completing the studies and fulfilling all obligations, each student receives a certificate of completion of studies from the student administration office; at the promotion ceremony, students receive a diploma in Croatian language and a supplementary study certificate in Croatian and in English, without bearing additional costs. The Panel examined the supplementary study certificate provided by the student administration office and confirms that it contains all required data. Upon request made by the student, the HEI can, for a charge, issue a diploma in English language. Students express their satisfaction with the studies by taking part in surveys conducted after they have completed their studies; since April 2019, an Alumni club is active at the College.

Recommendations for improvement

No recommendations

Quality grade

High level of quality

3.10 The higher education institution is responsible for the employability of graduates.

Analysis

Evidence gathered: Self-evaluation Report, feedback from the Management, representatives of the industry/business, representative of the Center for Career Information and Counseling, e-mail from the Croatian Employment Service (CES) about the number of graduated students listed in the CES who are unemployed and looking for a job, Review of Study Programs in Brod-Posavina County, held on 22.3.2019, Tables 3.2. Structure of enrolled students and interest in undergraduate study programmes, 3.3. Structure of enrolled students and interest in graduate study programmes and 3.7. Employment of graduates/alumni in the past 3 calendar years.

The following elements of the standard are realised: The College collects and analyses data on the employability of graduates from the Croatian Employment Service, Slavonski Brod Regional Office and by contacting graduates via e-mail or telephone. Enrolment quotas are aligned with the *Recommendations for Education Enrolment and Scholarship Policy* issued by the Croatian Employment Service. Feedback provided by business representatives from the County confirmed that the College takes care of the employability of students by organising round table discussions in order to gather information on the current needs of the labour market. Through a cooperation with the Center for Career Information and Counseling (CISOK), graduates can obtain information on lifelong professional orientation and career development, educational opportunities, requirements for particular professions, conditions for the continuation of their education and lifelong learning programmes. At the Review of Study Programmes in Brod-Posavina County held on 22.3.2019, graduates of the College participated in the panel discussion *Staying and succeeding in the Republic of Croatia*; they conveyed their experiences of studying to the interested participants of the Review and spoke of the knowledge they received during their studies. Through activities carried out by the Alumni Club and by communicating via social media, former and current students receive information about ongoing activities conducted by the College. On the basis of the analysis from Tables 3.2. and 3.3., it is evident that in the last few years there is a decline in the students' interest for enrolling in the following study programmes: Production Engineering, Plant Production and Ecological Agriculture and Rural Development. The analysis of data from Table 3.7. shows that graduates of the Production Engineering studies have the highest employability rates.

Preporuke za poboljšanje

The College needs to modernise the following study programmes: Production Engineering, Plant Production, Energetics and Ecological Agriculture and Rural Development by introducing new courses and/or programmes/moduls in order to increase students' interest for enrolling in the aforementioned study programmes. The HEI should modernise study programmes according to the needs of the local economy in order to have employability rates of graduates as high as possible.

Quality grade

Satisfactory level of quality

IV. Teaching and institutional capacities

4.1 The higher education institution ensures adequate teaching capacities.

Analysis

Evidence gathered: Executive plan of teaching on UGPS Plant Production for academic year 2018/19 (Rev. 1), Executive plan of teaching on UGPS Management for academic year 2018/19 (Rev. 1), Executive plan of teaching on UGPS Production Engineering for academic year 2018/19 (Rev. 3), Executive plan of teaching on SGPS Ecological Agriculture and Rural Development for academic year 2018/19 (Rev. 1), Executive plan of teaching on SGPS Energetics for academic year 2018/19 (Rev. 3), Executive plan of teaching on SGPS Management for academic year 2018/19 (Rev. 1), Decision on teaching workload of part-time students at the studies of the College of Slavonski Brod in the academic year 2018/19, Rulebook on the work of the College of Slavonski Brod, Decision on standardisation of work in the academic year 2018/19, MOZVAG Table 4.1.b Structure of staff for Polytechnics and Colleges in the current academic year, MOZVAG Table 4.2. Dynamics of employment of teachers and associates in the last five years, MOZVAG Table 4.3. Teacher at the higher education institution in the current academic year, MOZVAG Table 4.4. Teachers at study programmes in the current academic year.

The following elements of the standard are realised: All study programmes are in compliance with the Rulebook regarding the number of teachers for the realisation of the study programme and all teachers have the appropriate competencies, i.e. all teachers are elected into appropriate teaching or scientific-teaching positions (MOZVAG Table 4.4.). The ratio between full-time teachers and students is adequate which is evident from the data on the number of teachers for the realisation of the study programme and Tables 3.1. to 3.3. from the Analytical Annex to the SER. The Panel learned from the Management's feedback that the workload of teachers is calculated on the basis of the old collective agreement (450 teaching hours \pm 20 %), but since the Ministry of Science and Education has allowed the employment of only two (2) teachers on the Ministry's expense since 2010, certain teachers have a considerable workload. After examining the study programmes and their courses, the Panel assessed the qualification of teachers for teaching courses at the following study programmes:

UGPS Plant Production – all teachers are qualified for the courses they teach;

UGPS Management – all teachers are qualified for the courses they deliver;

UGPS Production Engineering – all teachers are qualified for the courses they deliver;

SGPS Ecological Agriculture and Rural Development – all teachers are qualified for the courses they deliver;

SGPS Energetics – all teachers are qualified for the courses they deliver;

SGPS Management – all teachers are qualified for the courses they deliver.

From all the above-stated, it is evident that the elements of the standard describing if the College ensures adequate teaching capacities are met, except to the extent that regards the workload of certain (not all) teachers. The issue concerning the overload of certain teachers should be addressed by the Ministry of Science and Education.

Recommendations for improvement

Given the considerable workload of certain teachers, the Panel suggests to open negotiations with the line Ministry in order to obtain the appropriate number of salary multipliers which, in compliance with the new collective agreement, would keep teacher's workload within limits. The main responsibility for non-employment lies within the Management Council and the line Ministry.

Quality grade

Satisfactory level of quality

4.2 The higher education institution ensures appropriate quality of external associates.

Analysis

Evidence gathered: MOZVAG Table 4.1.b. Structure of staff for Polytechnics and Colleges in the current academic year, Rulebook on final thesis, Rulebook on the professional practice of the College of Slavonski Brod, examples of completing professional practice in the parent institution of the external associate (Secondary School Matija Antun Reljković in Slavonski Brod, Petrokemija d.d., Đuro Đaković Thermal Power Plants).

The following elements of the standard are realised: On the basis of a visit to the Secondary School Matija Antun Reljković, BioTech Institute and Đuro Đaković Thermal Power Plants factory, the Panel concludes that the parent institutions of external associates where student professional practice is conducted are very well equipped. BioTech Institute's laboratories are provided with the latest equipment produced by renowned manufacturers (Agilent) following global trends. Greenhouses at the Secondary School Matija Antun Reljković meet the criteria set by the most sophisticated greenhouses used in the agricultural industry. Computers and equipment for mechanical processing also meet standards of excellence. External associates include in the teaching process the latest available insights thanks to their working experience.

The College has applied for the project *Development, promotion and implementation of professional practice in higher education*, where one of the planned activities is the analysis of the mentoring system in order to improve the quality of professional practice and to enable students to gain work experience. In this way, the HEI plans to encourage the participation of mentors in practice and their mentoring of final and diploma thesis.

It is evident from the external associates' CVs that they all have the necessary qualifications and working experience. It is visible from the gathered evidence that the College has concluded cooperation agreements with numerous external entities. In the feedback they provided, students expressed the wish for even more different kinds of professional practice.

Recommendations for improvement

From Table 4.2. in the Self-evaluation Report it is visible that external associates mentor 9,18 % of the total number of students. It is recommended to increase this percentage in favour of external associates. Moreover, it would be advisable to widen the scope of professional practice and introduce more diversity in it, especially for SGPS Energetics, as suggested by students.

Quality grade

Satisfactory level of quality

4.3. Teacher recruitment, advancement and re-appointment is based on objective and transparent procedures, which include the evaluation of excellence.

Analysis

Evidence gathered: Strategy of the College of Slavonski Brod 2018-2022, Decision to announce a public tender for the selection and employment of teaching staff, Rulebook on the internal organisation and organisation of the posts of the College of Slavonski Brod, Rulebook on the announcement and implementation of public tenders at the College of Slavonski Brod, examples of conducted public tender procedure (announcement of a public tender for employment, Decision on the appointment of a Professional Commission for the implementation of a public tender, Report of the Professional Commission), Statute of the College of Slavonski Brod, Decision on conditions for assessment of teaching and professional activity in the process of election to teaching positions of the Council of Polytechnics and Colleges of the Republic of Croatia, Quality Procedure PSK 12 Recruitment of teaching staff, Decision on the appointment of members to the Commission for verification of eligibility for the election into positions at the College of Slavonski Brod, Decision to adopt a promotion plan for 2019 at the College of Slavonski Brod, Report on the realisation of promotion into teaching positions for staff of the College of Slavonski Brod and external associates in 2018, Reports on performed teaching, development of professional development plans, development of plans for attending conferences, educations and training – Reports, regular fulfilment of obligations at doctoral studies – regular monitoring of progress of doctoral studies.

The following elements of the standard are realised: No complaints at all arose from the feedback provided by teachers regarding the selection, appointment and evaluation of teachers. From the provided documents, it is evident that the College has put in place the required methods for selection of candidates for each post in line with the applicable legal requirements and rulebooks. From the College's Strategy, it is evident that employments are part of the College's development goals in line with the current socio-economic opportunities.

Some of the above-mentioned reports contain indicators of excellence that include teaching, professional and scientific work.

From all the above-stated, the gathered evidence and feedback provided by teachers and the Management, it is evident that the HEI complies with the elements of standard under point 4.3.

Recommendations for improvement

It is recommended to develop additional criteria for the promotion of teachers that will be fully in line with the College's strategic goals, as for example more completed professional trainings of candidates as well as information on professional projects held by candidates.

Quality grade

Satisfactory level of quality

4.4 The higher education institution provides support to teachers in their professional development.

Analysis

Evidence gathered: Strategy of the College of Slavonski Brod 2018-2022, Publishing plan of the College of Slavonski Brod for 2019, Teacher training plan, Rulebook on the improvement and professional development of teaching and non-teaching staff of the College of Slavonski Brod, example (English language – knowledge test, workshop *Internal communication* – survey), Contracts for doctoral studies, evidence on held educations, Mobility – final reports, MOZVAG Tables 4.5., 4.6. and 4.7., feedback from teachers on experiences of participating in competency development programmes, information on how to encourage participation and actual participation of teachers in competency development programmes (workshops, seminars) with a focus on supporting student learning, information on how to encourage participation in mobility programmes and actual mobility of teachers abroad, Statute of the College of Slavonski Brod, project application tender.

The following elements of the standard are realised: The HEI has established a Commission for the evaluation of teachers that, on the basis of estimations of programme delivery and teacher evaluation made by students, issues recommendations for the improvement of teaching competencies. In the feedback they provided, teachers expressed their satisfaction with the Erasmus programme for teachers; the programme lasts seven months and quotas are always fully met. Teachers did not make any remarks concerning the way in which the College's Management provides them with support in their professional development. In agreement with teachers, the HEI prepares individual professional training plans and secures funds for teachers' participation in various activities. Moreover, it should be noted that the College is the holder of the STEM Eco&Energetics Project which aims to increase the number of study programmes in English language, leading ultimately to a higher level of internationalisation and thus bringing additional benefit for teachers. Teachers also have the right to take a sabbatical year, in accordance with the Statute. From the analysis of the number of outgoing teachers' mobilities, it is evident that, in the period from 2016 till 2019, this figure ranges between 11 % and 14 % of the total number of teachers. The only major difference can be observed in 2015 when that figure amounted to 24 %.

Mobility is achieved also through the CEEPUS mobility programme, data on which is visible in the Table 4.4. of the Self-evaluation Report.

Recommendations for improvement

Considering the strong interest of teachers for mobility programmes, as the Panel learned from the feedback provided by teachers, it is suggested to increase the number of teachers participating in outgoing mobility. The number of teachers on an incoming mobility should also be increased. When it comes to outgoing mobility, the HEI should take into account that other teachers must be able to undertake the obligations of teachers absent at that moment.

Quality grade

Satisfactory level of quality

4.5 The space, equipment and the entire infrastructure (laboratories, IT service, work facilities etc.) are adequate for the delivery of the study programmes and ensure the achievement of intended learning outcomes and the implementation of professional and/or scientific activity.

Analysis

Evidence gathered: Insight into resources during the visit to the higher education institution, information on premises, equipment and the overall infrastructure, feedback

from students and teachers on the satisfaction with the spatial conditions for studying and conducting student activities, Scientific-research Activity Plan prepared for two Departments, Decision of the Management Council of the College of Slavonski Brod to support the initiative to address the spatial needs of the College of Slavonski Brod, MOZVAG Tables 4.8. and 4.9.

The following elements of the standard are realised: During the initial accreditation of the study programme Ecological Agriculture and Rural Development in 2017, the available surface area per student was 2,65 m², while today the available surface area is somewhat smaller because the HEI lost two premises; one proved to be inadequate and the other had to be left as it became necessary for other purposes. This led to a reduction in the available surface area per student, but it is still larger than the minimally required 1,25 m² per student. The dislocation of the College on more addresses, visible from data in the Self-evaluation Report, poses a problem. Lectures are organised in such a way that students are located in one place if possible, while teachers move from one location to another, but this is not always easily feasible. Feedback from students showed that they would prefer to attend lectures on one location which would enable to maintain better social contacts between students of different study years and study programmes. Teachers' work would also be facilitated if they wouldn't have to move from one location to another between lectures, and therefore they would have more time to prepare their lectures. Brod-Posavina County and the City of Slavonski Brod recognised this issue and donated land for the construction of the campus and the necessary buildings; a building permit was issued in 2015, but given the high construction costs (over HRK 150 million), it is highly probable that the aforementioned project will be difficult to carry out.

Laboratory teaching is carried out in external institutions such as Đuro Đaković d.d., M. A. Reljković Secondary School, with their modernly equipped greenhouses, and BioTech Institute. Upon visit to the aforementioned institutions, the Panel established that the equipment and premises meet the high standards for laboratory classrooms.

In June 2019, a pre-contract for the lease of office space on three floors, in total 1500 m², located in the center of the city was signed. The fact that the College has not all the necessary means required to put this office space to use poses a problem.

Recommendations for improvement

The Ministry of Science and Education and the Management Board of the College, whose majority is formed by members appointed by the aforementioned Ministry, are required to secure an adequate space for the normal functioning of the College of Slavonski Brod, by taking the appropriate decisions and giving their consent in order to meet this need, in compliance with the above determined strategic importance of VuSB which is described in this Report. If the Ministry of Science and Education and the Management

Board fail to act, this shall be considered as a direct attack on the viability of VuSB and its strategic importance for the development of the Brod-Posavina County, and the Republic of Croatia as a whole.

Quality grade

Minimum level of quality

4.6 The library and library equipment, as well as access to additional resources ensure the literature necessary for ensuring high-quality of study and scientific and teaching activity.

Analysis

Evidence gathered: Rulebook on the work of the library of the College of Slavonski Brod, visit to the library, insight into the availability of teaching literature, the number of stored final and specialist diploma theses, availability of teaching content through secure sites, the adequate number of copies of compulsory literature given the number of students, feedback from students on the possibility to use the library services and the availability of required national and international literature, MOZVAG Table 4.10.

The following elements of the standard are realised: The College's library surface is 157 m² and its operation and organisation are defined by a Rulebook. The College has signed an agreement with the Slavonski Brod City Library in order to enable students and teachers to use the latter's library services; the aim is to increment HEI's capacities. From insight into the library's fund, it is evident that the library is provided with literature required for delivering study programmes. According to the feedback provided by the Management, this year the HEI spent HRK 60 000 from project funding on the acquisition of additional library resources.

At the moment, the library resources meet the needs of studying as well as professional and scientific activities, but there is always room for improvement, be it regarding the library's premises or the library fund. In the library fund there are also ten scientific and professional national publications in the form of magazines (MOZVAG Table 4.10. in the Self-evaluation Report). Only one bibliografic database funded by university funding is stated in the Self-evaluation Report.

Recommendations for improvement

Considering the number of students, it is recommended to enlarge the library and to continually invest in the development of the library's fund (printed and digital material), as well as to employ one expert librarian.

It is recommended to increase the number of available bibliografic databases in order to provide researchers and lecturers with the possibility to access current scientific articles from various fields.

Quality grade

Satisfactory level of quality

4.7 The higher education institution rationally manages its financial resources.

Analysis

Evidence gathered: Statute of College of Slavonski Brod, Financial plan, Financial Report, FINA Certificates, Audit Certificats, Proposed revised financial plan and Notes to the financial statements, Proposal for amendments to the financial plan, Procurement plan, Changes to the Procurement plan, Register of public procurement contracts and framework agreements of the College of Slavonski Brod, Rulebook on the manner of allocation and use of own and assigned revenue, Public procurement procedures, Rulebook on public procurement procedure at the College of Slavonski Brod, Lifelong Learning Programmes, EU funding sources, MOZVAG Tables 4.11. and 4.12.

The following elements of the standard are realised: In the HEI's financial planning system, the Dean proposes the financial plan, the procurement plan and the Rulebook on the manner of allocation and use of own and assigned revenue. Upon an opinion brought by the Management council, the Dean proposes to the Professional council the College's annual budget and the manner of distribution of resources; the Dean also submits to the Management Council and the Professional council a report on his work and on the financial operations of the College.

On the basis of available documents, and especially tables showing HEI's incomes and expenditures, the Panel concluded that the College of Slavonski Brod manages available financial resources transparently, purposefully and effectively. Additional sources of financing are also being used purposefully and in accordance with the Strategy of the College. Seven employees are paid from the College's own revenue thanks to tuition fees paid by students. In addition to study programmes, the College implements also more than twenty different lifelong learning programmes through which additional sources of financing are obtained. One part of the additional sources of financing is being realised from EU Funds. In the past eight years, two persons were employed on teaching positions financed by the Ministry for Science and Education.

Recommendations for improvement

It is recommended to increase the College's incomes through additional sources of financing such as various international and EU projects and by way of an even closer cooperation with the existing industry.

Quality grade

Satisfactory level of quality

V. Professional and/or scientific activity

5.1 Teachers and associates employed at the higher education institution are committed to the achievement of high quality and quantity of professional and/or scientific activity.

Analysis

Evidence gathered: Self-evaluation Report, feedback from course holders, insight into the Croatian Scientific Bibliography, *Google Research* or *Google Scholar*, Rulebook on the training and professional development of teaching and non-teaching staff, Table 5.1. Bibliography (in the past five years).

The following elements of the standard are realised: The total number of published papers according to the Rulebook on conditions for the election into scientific positions, book authorships at national level, chapters in books, professional publications, peer-reviewed publications from scientific and expert meetings, papers published in the College's journals in the past five years is 515, of which 115 publications are a result of cooperation with other higher education institutions and scientific organisations. The ratio of papers per teacher in the last five years is 3.54. Since the College has permission to introduce and deliver undergraduate professional and specialist study programmes, the aforementioned ratio is satisfactory. The College keeps clear record of publications by specific areas/departments within the institution in its Annual Report. From the feedback provided by teachers, insight into the Rulebook on the training and professional development of teaching and non-teaching staff and the average number of publications per department in the past five years, it is evident that teachers and associates from various fields are equally encouraged to publish papers.

On the basis of an insight into the above-mentioned bibliographic databases, the Panel noticed a significant difference between holders of different courses. The number and quality of scientific and professional publications of certain teachers and associates is very limited and they don't promote actively their professional/scientific achievements at meetings at home and abroad.

Recommendations for improvement

The College should systematically encourage teaching staff and associates to write and publish quality professional and scientific papers. This could be achieved by rewarding teachers and associates depending on the categorisation and the citation index of scientific papers, and the relevance of professional papers. Even though the College invests in scientific/professional equipment and instruments, it should also develop its own laboratories in order to create an adequate developmental and research platform for carrying out professional and research projects as well as writing final theses, which

would result in the publication of a greater number of professional and scientific papers. The Rulebook on the training and professional development defines the conditions, forms and means of scientific and professional upskilling, training and professional development of teaching and non-teaching staff, but the College should take additional measures such as:

- Carry out an annual analysis of the scientific/professional production of teachers and on the basis of the obtained results, hold meetings with teachers and associates whose results are below average;
- On the basis of the carried out analysis and the meetings held with teachers whose results are below average, propose to the teachers a plan for their professional training;
- Motivate young lecturers and senior lecturers to enrol in postgraduate doctoral studies by reducing their teaching workload while keeping track of the results they achieve at the postgraduate study;
- Apply for a greater number of professional and scientific projects;
- Launch projects within the College in which students, teachers, associates and local businessmen would participate and that would result in the publication of papers by students and mentors;
- Work more actively on the establishment of connections with other higher education institutions and similar institutions through joint authorship of papers, the organisation of scientific and professional conferences and publication of professional journals;
- More experienced teachers should help their younger colleagues with the writing and publication of papers by providing them with guidance, leadership and as co-authors of papers.

Quality grade

Minimum level of quality

5.2 The higher education institution proves the social relevance of its professional and/or scientific research and transfer of knowledge.

Analysis

Evidence gathered: Self-evaluation Report, feedback from teachers, external stakeholders and alumni and Table 3.7. Employment of graduates/alumni in the past 3 calendar years from the Brod-Posavina County Employment Service.

The following elements of the standard are realised: The College monitors the needs of society, local community and labour market by organising multiple round table discussions with representatives of the industry and local community, participating at fairs as well as through projects related to the development of agriculture in the Brod-Posavina County and cooperation with Brod-Posavina County Employment Service.

The College delivers a vocational training and obligatory upskilling programme for persons conducting energy audits and/or energy performance certification of buildings. Feedback from teachers and business representatives confirmed that College's students contribute to the development of small family agricultural holdings through the completion of professional practice and the writing process of final theses. The HEI applied for the Practice+ project within the call *Development, improvement and implementation of professional practice in higher education* and the establishment of an entrepreneurial incubator is under way. Teachers of the College actively participate in the work of professional and public bodies in the Brod-Posavina County and the City of Slavonski Brod, civic associations and advisory bodies of certain private companies. From the evidence gathered and the available documentation, it is not evident that specific knowledge and technologies are transferred systematically to the municipal and local community and the business sector, apart from a cooperation with the Regional Center for biotechnology research and development of Brod-Posavina County.

Recommendations for improvement

Enhance cooperation with local businesses by solving concrete problems faced by professionals, counselling businessmen and providing expertise in accordance with the delivered study programmes. The HEI should participate more actively in knowledge and technology transfer projects which are important for the local, regional and wider social community through start-up companies, inclusion in scientific-technological parks and on the basis of concrete results of the work of the established entrepreneurial incubator.

Quality grade

Satisfactory level of quality

5.3 Professional and/or scientific achievements of the higher education institution have been recognized in the regional, national and international context.

Analysis

Evidence gathered: Self-evaluation Report, feedback from the Management, Table 5.3.b Professional projects in the last five years, Table 5.4. Work on conference organising committees in the last five years, Table 5.5. Editorial board in magazines in the last five years and interviews carried out during the visit to the Regional Center for biotechnology research and development (BioTech).

The following elements of the standard are realised: From the Management's feedback and the Self-evaluation Report, it is evident that various awards and recognitions have been conferred to teachers of the College for their professional and scientific work. Here are some examples:

1. *Research Excellence Award in recognition of outstanding contribution to the International Conferences „Vallis Aurea“* from the year 2008 to 2016 on the occasion of the *5th International Conferences „Vallis Aurea“*. Focus on: Research and Innovation, Požega;
2. Award in recognition for the best scientific work in the field of sport, 23rd Summer School of Kinesiologists of the Republic of Croatia, Poreč, 2014;
3. Best presentation award for *Modern Applications of UV-VIS Spectroscopy in Agriculture* at the 6th International Scientific and Expert Conference TEAM 2014, Kecskemet, Hungary.

According to the Table 5.3.b, the College is the holder of the still active STEM Eco&Energetics project financed from the European Social Fund and has participated as a partner in three other projects also financed from the ESF.

Eleven teachers and associates of the College have been involved in the organisation of international conferences and nine of them also participated in these conferences. Moreover, teachers and associates of the College participate in the Editorial Board of the Agronomy Gazette and they also act as Editor-in-Chief, representatives in the Editorial Board and Technical Editor of the Proceedings of the College of Slavonski Brod. Teachers and associates of the College are active members of professional associations.

Recommendations for improvement

In order to increase the regional, national and international visibility of the College it is necessary to:

- Participate in a greater number of professional projects at local, national and international level as a project holder or partner;
- In cooperation with family agricultural holdings and by means of different national and EU incentives, promote the plantation of forgotten seed varieties of the Slavonia region such as: flax, hemp, spelt, rye and sim.;
- Teachers and associates of the College should be more included in the organisational committees of national and international conferences;
- Teachers and associates should participate more actively at national and international conferences;
- Teachers and associates should participate more actively in journal's editorial and other boards;
- Establish stronger regional connections with similar higher education institutions in this part of Europe; the College could serve as an excellent link with higher education institutions from non-EU member states.

Quality grade

Minimum level of quality

5.4 Professional and/or scientific activities and achievements of the higher education institution improve teaching.

Analysis

Prikupljeni dokazi: Self-evaluation Report, feedback from teachers, interviews carried out during the visit to BioTech Center, chemistry laboratory of the Secondary School Matija Antun Reljković and engineering laboratories at the Đuro Đaković factory.

The following elements of the standard are realised: The mission of the College is to continuously improve and ensure the quality of higher education and its own activity within the existing study programmes, and by introducing, organising and delivering new professional studies in accordance with the needs of the economy and the labour market; while through its vision, the College seeks to position itself as a modern higher education institution with recognisable forms of vocational and lifelong education. In compliance with the College's mission and vision, research is being carried out at the BioTech Centre, chemistry laboratories of the Agricultural Secondary School, family agricultural holdings and trial facility in Slobodnica. Equipment for the Technical Department was purchased including: practicum for CNC Machines, practicum for Renewable Energetics, laboratory

for material testing, welding laboratory and laboratory for particle separation. As a result of the work and research carried out at the aforementioned teaching facilities, a certain number of final theses were written that were later published as professional papers in co-authorship with students.

The adoption of the Rulebook on rewarding, whose aim is to define the criteria and methodology of remuneration in order to motivate employees in a clear and transparent manner for perseverance and work efficiency, is in progress.

Recommendations for improvement

Make additional efforts in order to put the facility trial in Slobodnica to better use in the teaching and research process. Adopt the Rulebook on rewarding as soon as possible in order to motivate teachers and students to cooperate on development and research projects, which would result in a larger number of projects in which students participate and papers published in co-authorship with students.

Quality grade

Satisfactory level of quality

APPENDICES

1. Quality assessment summary - tables

<i>Quality grade by assessment area</i>				
<i>Assessment area</i>	Unsatisfactory level of quality	Minimum level of quality	Satisfactory level of quality	High level of quality
<i>I. Internal quality assurance and the social role of the higher education institution</i>			X	
<i>II. Study programmes</i>			X	
<i>III. Teaching process and student support</i>			X	
<i>IV. Teaching and institutional capacities</i>			X	
<i>V. Professional and/or scientific activity</i>		X		

<i>Quality grade by standard</i>				
<i>I. Internal quality assurance and the social role of the higher education institution</i>	<i>Unsatisfactory level of quality</i>	<i>Minimum level of quality</i>	<i>Satisfactory level of quality</i>	<i>High level of quality</i>
1.1 The higher education institution has established a functional internal quality assurance system.			X	
1.2 The higher education institution implements recommendations for quality improvement from previous evaluations.			X	
1.3 The higher education institution supports academic integrity and freedom, prevents all types of unethical behaviour, intolerance and discrimination.			X	
1.4 The higher education institution ensures the availability of information on important aspects of its activities (teaching, professional and/or scientific and social role).			X	
1.5 The higher education institution understands and encourages the development of its social role.			X	
1.6 Lifelong learning programmes delivered by the higher education institution are aligned with the strategic goals and the mission of the higher education institution, and social needs.			X	

<i>Quality grade by standard</i>				
<i>II. Study programmes</i>	<i>Unsatisfactory level of quality</i>	<i>Minimum level of quality</i>	<i>Satisfactory level of quality</i>	<i>High level of quality</i>
2.1 The general objectives of all study programmes are in line with the mission and strategic goals of the higher education institution and the demands of the labour market.			X	
2.2 The intended learning outcomes at the level of study programmes delivered by the higher education institution are aligned with the level and profile of qualifications gained.		X		
2.3 The higher education institution provides evidence of the achievement of intended learning outcomes of the study programmes it delivers.			X	
2.4 The HEI uses feedback from students, employers, professional organisations and alumni in the procedures of planning, proposing and approving new programmes, and revising or closing the existing programmes.			X	
2.5 The higher education institution ensures that ECTS allocation is adequate.			X	
2.6 Student practice is an integral part of the study programmes.			X	

<i>Quality grade by standard</i>				
<i>III. Teaching process and student support</i>	<i>Unsatisfactory level of quality</i>	<i>Minimum level of quality</i>	<i>Satisfactory level of quality</i>	<i>High level of quality</i>
3.1 Admission criteria or criteria for the continuation of studies are in line with the requirements of the study programme, clear, published and consistently applied.			X	
3.2 The higher education institution gathers and analyses information on student progress and uses it to ensure the continuity and completion of study.			X	
3.3 The higher education institution ensures student-centred learning.			X	
3.4 The higher education institution ensures adequate student support.				X
3.5 The higher education institution ensures support to students from vulnerable and under-represented groups.			X	
3.6 The higher education institution allows students to gain international experience.				X
3.7 The higher education institution ensures adequate study conditions for foreign students.			X	
3.8 The higher education institution ensures an objective and consistent evaluation and assessment of student achievements.			X	
3.9 The higher education institution issues diplomas and Diploma Supplements in accordance with the relevant regulations.				X
3.10 The higher education institution is responsible for the employability of graduates.			X	

<i>Quality grade by standard</i>				
<i>IV. Teaching and institutional capacities</i>	<i>Unsatisfactory level of quality</i>	<i>Minimum level of quality</i>	<i>Satisfactory level of quality</i>	<i>High level of quality</i>
4.1 The higher education institution ensures adequate teaching capacities.			X	
4.2 The higher education institution ensures appropriate quality of external associates.			X	
4.3 Teacher recruitment, advancement and re-appointment is based on objective and transparent procedures, which include the evaluation of excellence.			X	
4.4 The higher education institution provides support to teachers in their professional development.			X	
4.5 The space, equipment and the entire infrastructure (laboratories, IT service, work facilities etc.) are adequate for the delivery of the study programmes and ensure the achievement of intended learning outcomes and the implementation of professional and/or scientific activity.		X		
4.6 The library and library equipment, as well as access to additional resources ensure the literature necessary for ensuring high-quality of study and scientific and teaching activity.			X	
4.7 The higher education institution rationally manages its financial resources.			X	

<i>Quality grade by standard</i>				
<i>V. Professional and/or scientific activity</i>	<i>Unsatisfactory level of quality</i>	<i>Minimum level of quality</i>	<i>Satisfactory level of quality</i>	<i>High level of quality</i>
5.1 Teachers and associates employed at the higher education institution are committed to the achievement of high quality and quantity of professional and/or scientific research.		X		
5.2 The higher education institution proves the social relevance of its professional and/or scientific research and transfer of knowledge.			X	
5.3 Professional and/or scientific achievements of the higher education institution have been recognized in the regional, national and international context.		X		
5.4 Professional and/or scientific activities and achievements of the higher education institution improve teaching.			X	

2. Visit protocol

**Reakreditacija
Veleučilište u Slavonskom Brodu**

**Re-accreditation of the
College of Slavonski Brod**

Edukacija Stručnog povjerenstva

Training of Panel members

Mjesto događanja:

Agencija za znanost i visoko obrazovanje

Venue:

Agency for Science and Higher Education

*Donje Svetice 38/V
10 000 Zagreb*

	Ponedjeljak, 11. studeni 2019.	Monday, 11th November 2019
09:00 – 10:00	Edukacija članova Stručnog povjerenstva (kratko predstavljanje rada Agencije, upoznavanje sa sustavom visokog obrazovanja u Hrvatskoj, upoznavanje s Postupkom reakreditacije, Standardima za vrednovanje kvalitete i načinom pisanja završnog izvješća)	Training for the expert panel members (short presentation of ASHE, introduction to the higher education system in Croatia, introduction to the re-accreditation procedure, standards for the evaluation of quality and writing the final report)
10:00 – 10:15	<i>Pauza za kavu</i>	<i>Coffee break</i>
10:15 – 13:15	Priprema Stručnog povjerenstva za posjet Veleučilištu u Slavonskom Brodu (rad na Samoanalizi) Pitanja za posjet	Preparation of the expert panel members for the site visit (working on the Self-evaluation) Questions for the site visit
13:15 – 14:00	<i>Ručak</i>	<i>Lunch</i>
14:00 – 17:00	Priprema Stručnog povjerenstva za posjet (rad na Samoanalizi) Pitanja za posjet	Preparation of the expert panel members for the site visit (working on the Self-evaluation) Questions for the site visit

PROTOKOL POSJETA

*Mjesto događanja: Veleučilište u
Slavonskom Brodu*

VISIT PROTOCOL

Venue: College of Slavonski Brod

Matije Gupca 24, 35 000 Slavonski Brod

	Utorak, 12. studeni 2019	Tuesday, 12th November 2019
09:00 – 10:00	Sastanak s upravom visokog učilišta (dekan, prodekani) i tajnik (bez prezentacije)	Meeting with the management (Dean, Vice- deans) and Secretary (no presentations)
10:00 – 11:00	Sastanak članova Stručnog povjerenstva (analiza dokumenata)	Internal meeting of the panel members (Document analysis)
11:00 – 11:45	Sastanak s pročelnicima Društvenog odjela, Poljoprivrednog odjela i Tehničkog odjela	Meeting with the heads of the Departments of Management, Transport and Administrative Studies
11:45 – 12:45	Sastanak s nastavnicima u stalnom radnom odnosu koji nisu na rukovodećim mjestima (otvoreni sastanak)	Meeting with full-time employed teachers who do not have managerial positions (open meeting)
12:45 – 14:00	<i>Radni ručak Stručnog povjerenstva</i>	<i>Working lunch</i>
14:00 – 14:45	Sastanak sa studentima (otvoreni sastanak za sve studente)	Meeting with the students (open meeting for all students)
14:45 – 15:45	Sastanak s vanjskim predavačima	Meeting with external lecturers
15:45 – 16:30	Sastanak s vanjskim dionicima - predstavnicima strukovnih i profesionalnih udruženja, poslovna zajednica, poslodavci, stručnjaci iz prakse	Meeting with external stakeholders - representatives of professional organisations, business sector/industry sector, employers, professional experts
16:30 – 17:00	<i>Interni sastanak članova Stručnog povjerenstva refleksija o viđenom</i>	<i>Joint meeting of the expert panel members – reflection on the day</i>
17:00 – 17:30	Organizacija dodatnog sastanka o otvorenim pitanjima (prema potrebi)	Organisation of additional meeting on open questions (if needed)

Hotel u Slavonskom Brodu

18:00 – 20:00	<i>Pisanje završnog izvješća</i>	<i>Work on Final Report</i>
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PROTOKOL POSJETA

*Mjesto događanja: Veleučilište u
Slavonskom Brodu*

VISIT PROTOCOL

Venue: College of Slavonski Brod

Matije Gupca 24, 35 000 Slavonski Brod

	Srijeda, 13. studeni 2019.	Wednesday, 13th November 2019.
09:00 – 10:00	<i>Sastanak članova Stručnog povjerenstva (Analiza dokumenata)</i>	<i>Internal meeting of the panel members (Document analysis)</i>
10:00 – 11:30	Sastanak članova Stručnog povjerenstva s: – Voditeljem jedinice za osiguravanje sustava kvalitete – Voditeljem programa cjeloživotnog obrazovanja – Voditeljem ureda za međunarodnu suradnju – Erasmus i CEEPUS koordinatorima – Voditeljima stručne prakse	Meeting with: – Head of the Quality Assurance System Unit – Head of the Life Long Learning Programmes – Head of the Office for International Cooperation – Erasmus and CEEPUS Coordinators – Leaders of internship
11:30 – 12:15	Sastanak s alumnijima (koji nisu zaposlenici Veleučilišta)	Meeting with the alumni (which are not employees of the HEI)
12:15 – 13:30	<i>Radni ručak Stručnog povjerenstva</i>	<i>Working lunch</i>
13:30 – 15:30	– Obilazak (knjižnica, referada, informatičke učionice) – prisustvovanje nastavi – obilazak radilišta (Poljoprivredna škola, Đ.Đaković i laboratoriji)	– Tour of the HEI (library, IT services, student office) – participation in teaching classes – visit of worksites and laboratories
15:30 – 16:15	Interni sastanak članova Stručnog povjerenstva	Internal meeting of the panel members
16:15 – 16:45	Organizacija dodatnog sastanka o otvorenim pitanjima, prema potrebi	Organisation of additional meeting on open questions, if needed
16:45 – 17:00	Završni sastanak s dekanom i prodekanima	Exit meeting with the dean and vice-deans

Rad na završnom izvješću

Work on Final Report

Mjesto događanja:
Agencija za znanost i visoko obrazovanje

Venue:
Agency for Science and Higher Education

*Donje Svetice 38/V
10 000 Zagreb*

	Četvrtak, 14. studeni 2019.	Thursday, 14th November 2019.
09:00 – 13:00	Sastanak Stručnog povjerenstva – izrada nacrt završnog izvješća i rad na dokumentu Standardi za vrednovanje kvalitete	Joint meeting of the expert panel members – Drafting the final report and working on the document Standards for the evaluation of quality
13:00 – 13:30	<i>Ručak</i>	<i>Lunch</i>
13:30 – 15:30	Rad na završnom izvješću	Drafting the final report

SUMMARY

The College of Slavonski Brod has put in place an adequate quality assurance system, in compliance with the requirements set out by the ESG. VuSB has developed and adopted a Strategy for 2018-2022 which includes a SWOT analysis indicating the main strenghts, weaknesses and opportunities. The Panel observed a continuous work on the improvement of the quality assurance system, four recommendations were only partially realised. The HEI has put in place activities for the realisation of these recommendations. VuSB actively and continuously presents and promotes its results and role in the society, and has adopted a Communication and Publicity Strategy according to which it operates and regularly publishes information. VuSB has licences for the delivery of undergraduate and specialist graduate professional studies in Management, Production Engineering, Energetics, Plant Production and Ecological Agriculture and Rural Development. VuSB has defined learning outcomes for each course and all study programmes which are in compliance with the HEI's mission and goals. The Panel has given a recommendation to reduce the share of ex cathedra teaching (lectures) and increase the number of hours of professional practice and seminar papers presented by students. If possible, each teacher shouldn't participate in (or be the holder of) more than three courses in the study programme executive plan.

Upon the examination of the documentation and during the site visit, it was established that the College provides an adequate support to students and that the majority of elements of Standard III Teaching process and student support has been realised. It is necessary to introduce additional measures in order to reduce drop-out rates. Teaching is student-oriented and VuSB provides support to all students, including students from vulnerable and underrepresented groups – students of lower socio-economical status can get a scholarship and the possibility to pay their tuition fee in several instalments. HEI's premises should be made more accessible to students with disabilities. The College provides adequate support to students applying to international mobility programmes, but the number of incoming mobilities should be increased. Evaluation and assessment of students is objective and consistent, and upon compeltion of their studies, students receive an adequate diploma and diploma supplement.

The ratio between students and full-time teachers is appropriate. From 2010 till present, the Ministry of Science and Education has not given permission to employ more than two teachers at its expenses so that certain teachers are overloaded with work. Insight into study programmes and related courses showed that all teachers are qualified for the courses they teach as part of one of the study programmes. The dislocation of the College on more addresses in Slavonski Brod poses a problem. The HEI is trying to find a solution regarding the space conditions in cooperation with the County and the City of Slavonski

Brod. The library is equipped with literature necessary for teaching programmes and the HEI allocates additional funds for further equipment. The library and library equipment meet the requirements of studying and professional and scientific activity.

The Panel recommended to systematically encourage the entire teaching staff to produce and publish quality professional and scientific papers. The HEI is encouraged to purchase equipment and instruments mainly for teaching that would serve as a basis for the production of final theses and consequently, scientific/professional papers of a higher quality.

Taking into consideration all the produced evidence, the College meets the quality evaluation standards at a satisfactory level.